

2017 Annual Assembly of Hospice and Palliative Care

Case Poster Abstracts

How Do I Pray? Supporting a Grieving Family with Multiple Religious Beliefs (C900)

Mir Ali, MD, Jamaica Hospital Medical Center, Jamaica, NY

Oscar Corzo, MD, Brooklyn, NY

Michelle Espinoza, MD, Jamaica Hospital Medical Center, Jamaica, NY

Cassandra Vallese, LMSW, Jamaica Hospital Medical Center, Jamaica, NY

Sally Mathew, DO, Jamaica Hospital Medical Center, Jamaica, NY

Objectives

- Enable Palliative and Hospice care providers to identifying perceived barriers to providing spiritual and existential care
- Emphasize the importance of the spiritual assessment and understanding of multiple religious practices that may be present within the same family

Background: Providing spiritual support to family members during the dying process of a loved one is an integral part of the palliative care goals. In many cases, family members have similar religious practices, but on occasion, there is an incredible variation in religious practices in one family that adds an additional layer of understanding needed to effectively provide psychosocial support during this difficult time.

Case Description: An 80 year old female with history of ischemic heart disease was admitted for acute right leg ischemia for which she underwent emergent embolectomy and fasciotomy. Her hospital course was complicated by sepsis and hypoxic brain injury. After discussions with our Palliative Care team, her family agreed for hospice care. During this meeting, it was revealed the patient was a devout Hindu and her daughters were Hindu, Muslim and Christian. For days, they prayed together at her bedside using their own faith traditions. They also welcomed our hospice team members of different faiths to pray with them. After the patient died, she was cremated according to Hindu traditions, with her rites read by her Christian son.

Furthermore, they had a 13-day mourning period where the entire family stayed at the eldest son's house in mourning with designated areas of prayer based on religious beliefs. The ceremony ended with a recitation of Hindu hymns and verses of Quran in respect of the patient. There was also a memorial service held at a church. The patient's family appreciated our hospice team's involvement in providing support during this bereavement process.

Conclusion: The importance of end of life religious and cultural rituals that continue throughout the bereavement process cannot be underscored. Recognition of individual differences and

cultural nuances strengthens the family trust in the Palliative Care team supporting them through the death of a loved one.

Treating Cancer Related Pain in Pregnancy, What is the Best Approach? (C901)

Christa Andrews-Fike, MD, Mayo Clinic, Rochester, MN

Objectives

- At the end of the discussion, the audience will have an understanding of the main pharmacologic therapies for the treatment of cancer related pain in pregnancy
- At the end of the discussion, the audience will recognize non-pharmacologic approaches for treating cancer related pain in pregnancy
- At the end of discussion, the audience will have an awareness of potential negative effects that opioid treatments may have on the fetus

Background: Treating Cancer related pain is one of the prime roles of palliative care, although little is known about the best approach to treating cancer related pain in pregnancy. As more women delay child bearing until later in life, and the number of young women with cancer increases, treating cancer related pain during pregnancy will become more common. It is essential that we understand the best techniques to treat such pain and the implications this has on the unborn fetus.

Case Description: Mrs. C is a 26 year old woman with recurrent, ovarian carcinoma with metastases to the brain, who is status post whole brain radiation. She had an initial diagnosis of a mucinous borderline tumor of the ovary at the age of 20, which was successfully treated with excision. She had been trying to get pregnant for several years, and found out that she was pregnant at the time of her diagnosis of recurrent ovarian cancer. She opted to carry the pregnancy to term while undergoing chemotherapy. She presented to the palliative care clinic for management of her cancer related abdominal pain and headaches. Although she agreed to treatment of her cancer pain with opioids, she had significant concerns about these medications and their effects on her unborn child, so she tried to limit her use. She was treated with morphine SR and hydromorphone IR. Doses were titrated to hydromorphone 6 mg as needed and Morphine SR 60 mg twice daily.

Conclusion: Opioids are first line treatment of cancer associated pain and can be used in pregnancy, despite limited data to guide best practices. We will discuss the effects of opioids on the unborn fetus in addition to alternative treatments for pain that are safe in pregnancy to guide providers in the management of cancer associated pain in pregnancy.

Prompt Resolution of Adhesion-Induced Malignant Bowel Obstruction after Extended Period of Usual Care with Triple Regimen of Octreotide, Metoclopramide and Dexamethasone (C902)

Umeer Ashraf, MD, University of New York at Buffalo, Buffalo, NY

Amy Case, MD FAAHPM, Roswell Park Cancer Institute, Buffalo, NY

Objectives

- Recognize the role and identify opportunities of palliative medicine in inoperable malignant bowel obstruction.
- Explain the pathophysiology of malignant bowel obstruction and explore palliative treatments.
- Describe role of octreotide, metoclopramide and dexamethasone in inoperable adhesion-induced intractable bowel obstruction.

Background: Malignant bowel obstruction is a challenging complication leading to distressing symptoms in patients with advanced cancer. Prognosis is usually few weeks but successful treatment prolongs survival. Role of surgery and stents is limited to focal obstruction in few selected patients. Medical management remains mainstay of therapy with aim of palliation and enabling recovery of bowel function. The premise is to break the vicious cycle of secretions, mucosal edema and inflammation. Studies have suggested efficacy of pharmacological agents in tumor associated obstruction but their role in adhesions related obstruction is unproven.

Case Description: A 55 year old female diagnosed with stage IV colon cancer previously treated with chemo-radiation was admitted for bowel obstruction due to sigmoid stricture. There was initial improvement following sigmoid resection which was short lived, with recurrence due to adhesions. After a month of conservative treatment with nasogastric tube, analgesics, anti-emetics and parenteral nutrition, her symptoms continued unabated prompting palliative team consult. Our recommendation included initiation of octreotide, metoclopramide and dexamethasone. Over the next 2 days, nasogastric output dropped significantly resulting in removal, abdominal pain improved and colostomy throughput became positive. After the patient tolerated a solid diet, parenteral nutrition was discontinued and the patient was discharged home and was able to return to work.

Conclusion: The above triple regimen is not standard treatment due to lack of evidence from randomized trials, but experience has shown the efficacy of these agents. Our case demonstrated efficacy of this regimen even in the setting of an intractable period of obstruction specifically due to adhesions.

Palifermin in the Prevention of Chemotherapy-Induced Oral Mucositis (C903)

Objectives

- To recognize the morbidity of Chemotherapy-Induced Oral Mucositis
- Describe the role of Palifermin, a keratinocyte growth factor, in the prevention of Chemotherapy-Induced Oral Mucositis
- Recognize that institutional access to Palifermin remains a barrier to more widespread utilization

Background: Oral Mucositis (OM) is a common adverse effect of oncologic treatments, occurring in 20-40% of patients receiving conventional chemotherapy, in 80% of patients undergoing hematopoietic stem cell transplantation (HSCT), and in nearly all patients receiving Head & Neck Radiation Therapy. OM causes pain, ulceration, and infection, resulting in breaks from therapy negatively impacting prognosis. Its management is resource intensive, requiring patient-controlled analgesics (PCA), total parenteral nutrition (TPN), increased Emergency Room visits, and frequent hospitalizations. This case highlights the morbidity of OM, which may have been reduced had Palifermin, a keratinocyte growth factor-1 FDA approved for OM prevention, been available at our institution.

Case Description: A 27-year old woman with AML, refractory to induction chemotherapy with cytarabine and idarubicin, achieving remission with an FLT3 inhibitor, underwent consolidation with high-dose Cyclophosphamide and Total Body Irradiation (TBI) prior to allogeneic-HSCT. Within 4 days of transplantation, 10 days of the conditioning regimen, she developed World Health Organization (WHO) Grade 3 OM. Despite management with topical anesthetics, mucosal coating agents, and PCA, her oral pain was poorly controlled and her oral intake was minimal. This predicament begs the question of whether Palifermin, which is used to prevent OM in patients with hematologic malignancy (HM) undergoing high-dose chemotherapy (with or without TBI) and autologous-HSCT, could have helped this patient undergoing an allogeneic-HSCT. Studies have demonstrated that in patients with HM undergoing a conditioning regimen and allogeneic-HSCT, Palifermin decreased the incidence and duration of WHO Grade 3 or 4 OM, decreased utilization of opioid analgesics and TPN, and improved patient well-being. Despite the evidence, Palifermin is not available at our institution, limiting incorporation into therapeutic regimens.

Conclusion: Chemotherapy-Induced Oral Mucositis causes significant morbidity. Palifermin is effective in preventing OM in patients with HM undergoing high-dose chemotherapy and autologous or allogeneic-HSCT. Increased availability and incorporation within therapeutic regimens could decrease the morbidity of OM.

Bone Marrow Transplant in Adolescents and Young Adults - Get them Talking! (C904)

Silvana Barone, MD, Johns Hopkins Hospital, Baltimore, MD

Arun Singh, MD, Johns Hopkins Medical Institute, Baltimore, MD

Objectives

- Identify important elements of the pre-transplant discussion to be had with adolescent and young adult patients
- Recognize the importance and use of advance care directives as a guiding tool for the medical team when clinical outcome and potential for recovery is uncertain

Background: Providers often hesitate to include adolescent and young adult patients facing bone marrow transplant (BMT) in discussions creating their own advance directives. This case demonstrates the utility of advance directives as a tool for facilitating decision-making in a case of prognostic uncertainty following BMT.

Case Description: A 23 year-old male with a complex medical history underwent BMT following relapse of Acute Myelogenous Leukemia (AML). He developed acute neurological decline requiring emergent Pediatric Intensive Care Unit (PICU) transfer, intubation and mechanical ventilation eleven days post-BMT. The palliative care team, patient and his family discussed the patient's wishes regarding life-sustaining therapies prior to BMT. An advance directive was created which stated a time-limited trial of artificial ventilation and healthcare proxy (HCP) as deemed appropriate by the patient. Following lack of clinical improvement over an appropriate time period as previously requested by the patient, an interdisciplinary family meeting was held. Decision-making focused on honoring the patient's previously articulated wishes. The patient's quality of life considerations were instrumental in guiding clinician and HCP decision-making. It was decided to decline additional medical interventions. The patient was extubated and transferred to the pediatric oncology floor where he died 3 days later.

Conclusion: Adolescents and young adults should have a chance to articulate their wishes for life-sustaining treatment prior to BMT. Documenting and executing advance directives can serve as an invaluable tool for family members and clinicians, especially when prognosis is uncertain.

Role of Child Life Specialists in Pediatric Palliative Care Objectives: To Understand the Importance of Child Life Specialists in End of Life Care for Pediatric Patients (C905)

Ratna Basak, MD FAAP FRCP, Stony Brook University Hospital, Stony Brook, NY

David Elkin, BS, MagicAid, Tarzana, CA

Pooja Rathi, DO, Stony Brook Children's Hospital, Stony Brook, NY

Michael Attard, MA CCLS, Stony Brook Children's Hospital, Stony Brook, NY

Lauren Sharaby, MS CCLS, Stony Brook Children's Hospital, Stony Brook, NY

Objectives

- To understand the role of Child life services to enhance quality of life in the journey to the end of life.
- To understand how therapeutic play can foster expression, decrease agitation and help relieve stress in children in the end of life.

Background: Each year more than 500,000 children in USA cope with life threatening conditions. Many are hospitalized for long periods for curative treatment or end of life care. Child life specialists help children and their families navigate the emotionally and physically demanding process of coping with hospitalization. They use their knowledge of child development to provide physical, emotional, social and psychological support. Play therapy, expression through art and music therapy promote effective coping, reduce anxiety, depression and improve mood in the last days of the child with terminal illness.

Case Description: A 12 year-old boy suffering from progressive ependymoma with hydrocephalus was admitted with worsening respiratory distress and bulbar dysfunction with evidence of multiorgan failure. He was depressed, moody and refused to talk to any providers. On day 10 of hospitalization, the child life specialist introduced a magician who visited him daily to show him card tricks. The primary aim of bringing magic to this patient was to improve his quality of life by helping relieve symptoms of pain, decrease agitation, increase relaxation and address symptoms of depression. The impact was almost magical with the child and parents being more relaxed and interactive.

Conclusion: Child life services provide children with opportunities to engage in normal play and recreational activities that promote growth, development, and feelings of success and fulfillment. They also help parents and other family members to participate as full partners in the health care team. They may use magic therapy to address physical, psychological, cognitive and social functioning. It is an intervention that is adaptable and flexible to a patient's needs, provides an opportunity for patients to feel empowered to encourage them to express feelings. As our current health care system grows, we would need child life specialists to be core members of the pediatric palliative care services.

A Request We Should Not Grant (C906)

Stephen Berns, MD, Icahn School of Medicine at Mount Sinai, New York, NY

Terry Altilio, LCSW, Mt Sinai Beth Israel, New York, NY

Objectives

- Appreciate the moral distress between clinicians' professional obligation to provide nondiscriminatory care and ethical obligations to respect patients' decision-making autonomy when patients make requests for caregiver preferences.

- Describe the laws and policies that exist for non-discrimination in healthcare patient care and accommodation for patient requests
- Brainstorm key ways to mitigate some of the moral distress in honoring or not honoring patient caregiver preferences

Background: In palliative care, we are taught to elicit patients' values and goals and execute a treatment plan that matches them. These goals are often about ways of living but occasionally include patient preferences for caregivers, requesting providers of similar gender or race for reasons of modesty and the comfort that comes from familiarity. These requests often create conflict in clinicians who elicit patients' values yet are committed to provide care that does not discriminate based on race, gender, religion, sexual orientation, or national origin. Unfortunately, hospital or agency policies do not solve the moral distress that clinicians often experience as they work to balance professional, ethical and personal obligations to provide nondiscriminatory care while respecting patients' choices.

Case Description: MG is a 59-year-old Caucasian man with cancer of the tongue treated and seen in the palliative care clinic for symptom management and evolving goals of care discussions. He has a tracheostomy and communicates through writing. MG is found to have progression of disease and in consultation with oncology, he and his wife choose to forgo additional chemotherapy and focus on symptom relief and time at home. At the close of a family meeting, when home hospice is discussed, the wife struggles to say "I hesitate to share this but my husband does not want any person of color to care for him in the house; please do not think badly of him". The palliative care team responds to this request by acknowledging the complex emotions behind the wife's disclosure and exploring the couple's right to privacy and the impact the request has on future services.

Conclusion: This case examines the interface of palliative care's commitment to patient-centered values and nondiscriminatory care, illustrating the potential need for increased dialogue on attitudes and policies regarding patients' caregiver preferences and the medical culture of accommodation.

The Role of Community-based Health Programs in Palliative Care: Improvements in a Terminal Breast Cancer Patient's Functional Capacity and Quality of Life (C907)

Beth Boyer-Kollas, PhD MS MDiv CIPC, YMCA of Central Florida, Orlando, FL

Chad Kollas, MD FACP FCLM FAAHPM, UF Health Cancer Center at Orlando Health, Orlando, FL

Objectives

- To help understand that minority women are at increased risk of poorly understanding their breast cancer and prognosis

- To help reinforce the importance of clarifying prognosis and reassessing goals of care throughout patients' entire clinical course
- To help understand that community-based health programs can help improve the functional capacity of terminal cancer

Background: Patients' knowledge of their breast cancer is "generally poor, particularly for minority women (Freedman, Cancer 2015)," and many poorly understand their prognosis (Shin, JPM 2016). Prognostic discussions with breast cancer patients can help them to "address their physical, functional, and breast cancer-related symptoms (Shin, JPM 2016)" and improve quality of life (Croom, J Support Oncol, 2013). LiveStrong at the YMCA is a community-based health program that helps cancer survivors to improve functional capacity through individualized physical and psychosocial support activities.

Case Description: A 59-year-old woman with Stage IV metastatic breast cancer, including widespread bony metastasis, expressed discontent with her home hospice experience while visiting the Palliative Medicine Clinic. She had enrolled in hospice thinking that her life expectancy was less than six months. A discussion of her case revealed that her bone metastasis had not progressed for years with anastrozole, fulvestrant and denosumab treatment. Her palliative care physician informed her that although her prognosis was terminal, her life expectancy with ongoing treatment was measured in years, not months. After determining that her main goals of care were maintaining control of pain and improving her functional capacity, she was referred to the LiveSTRONG Program at the YMCA. After participating for twelve weeks, she more than doubled her measurements of physical capacity, including 6-minute walking distance, 2-minute step count, leg press, chest press and stationary bicycling time. She also demonstrated significant improvements in her physical function, anxiety, fatigue and pain, as assessed by the PROMIS-29 System (U.S. Dept. HHS, 2016).

Conclusion: Clarifying the patient's prognosis helped her better understand the anticipated course of her illness and led her to reformulate her goals of care. Despite her terminal illness, she was able to improve her functional capacity and perceived quality of life by accessing the LiveSTRONG at the YMCA program, created to assist cancer survivors.

Buprenorphine for Non-malignant Pain in the Elderly (C908)

Kate Brizzi, MD, Massachusetts General Hospital, Boston, MA

Lorie Smith, MD, Massachusetts General Hospital, Cambridge, MA

Objectives

- After the presentation, the learner will be able to list at least three benefits of using buprenorphine for pain management in the elderly.

- After the presentation, the learner will be able to describe the mechanism of action of buprenorphine as used in pain management.

Background: Evidence suggests inadequate treatment of pain in the elderly, particularly among those with cognitive impairment. Pharmacologic options in this population are limited by drug-drug interactions, medical co-morbidities, and side effects of medications. Buprenorphine, a partial agonist at the mu-receptor, offers several unique advantages compared to other opioids including non-renal excretion, ease of administration, and good tolerability. Given these benefits, buprenorphine may be an effective analgesic in the elderly with non-malignant pain.

Case Description: Ms. T is a 90-year-old woman with a history of mild dementia and peripheral vascular disease who had previously undergone multiple vascular bypass procedures for lower extremity ischemia. She had been residing in a skilled nursing facility when she developed worsening left leg pain and discoloration over a two-week period. Oxycodone was started and titrated by her outpatient primary care provider to a dose of 10mg three times a day as needed. Given worsening symptoms, she was admitted to our hospital and diagnosed with critical limb ischemia. On admission, she was on a buprenorphine 5mcg/hr transdermal patch, which had been started by her outpatient provider given her limb pain. She underwent an above-the-knee amputation and our team was consulted for symptom management. As buprenorphine is not commonly used by our team, her case provided an opportunity to learn about the benefits and barriers to the use of buprenorphine, particularly in the elderly. Ms. T's pain was successfully managed by continuing the buprenorphine 5mcg/hr patch and transient use of dilaudid 1-2mg by mouth as needed.

Conclusion: Buprenorphine can be an effective and well tolerated analgesic in certain populations. We will review existing evidence for the use of buprenorphine in the elderly with non-cancer pain and describe settings in which buprenorphine may be beneficial for pain management. Additionally, we will highlight the limitations of buprenorphine in clinical practice.

Inotropic Support in Destination Home (C909)

Ilanit Brook, MD MSHS, Keck School of Medicine, University of Southern California, and Children's Hospital, Los Angeles, CA

Objectives

- Understand the use of Concurrent care in End Stage Heart Failure
- Discuss the communication techniques involved in discussion for desired location of end of life care
- Identify areas of cost savings for home inotropic support

Background: Children with end stage heart failure rely on inotropic infusions inpatient during deliberations if further interventions are possible. The options for those without future surgical interventions are too often to discontinue inotropes and die or continue a long hospitalization, with only the certainty at some point their hearts will fail on IV infusions. These prolonged hospitalizations are expensive, resource intensive and do not support families' goals for quality of life.

Case Description: Patient 1: 16 year old female, underlying genetic abnormalities who had a repaired Tetralogy of Fallot and presented to the hospital in cardiac arrest. She was found to have profound ventricular dysfunction without the possibility of further surgical interventions. During the hospitalization, parents agreed with DNR/DNI but wanted to fulfill her wish of being at home. She was discharged home on dopamine 10 mcg/kg/min after 28 days in PICU with home hospice support. She survived 50 days at home and died peacefully surrounded by family with an estimated cost savings of \$175,000.

Patient 2: 17 year old male with Duchenne's Muscular Dystrophy (DMD) who presented in cardiac arrest. Due to his diagnosis of DMD was not a candidate for any cardiac procedures. He spent 52 days in PICU and was discharged home with his baseline Bipap support and milrinone 0.5mcg/kg/min. He lived at home for 288 days, during which he graduated high school and completed an entire legacy project with the support of home hospice. He returned to the hospital after a cardiac arrest at home and was readmitted to PICU; dying 8 days later with a total cost saving of \$900,000.

Conclusion: Destination inotropic support at home avoids prolonged hospitalizations, increases quality of life in the patients' chosen location and reduces utilization of scarce resources. This is goal directed palliative care therapy in action.

The Decision To Perform Repeat Valve Replacement Surgery In IV Drug Users: The Tension Between Patient Autonomy and Fairness Related to Resource Allocation. Can We Unify Behind Solutions? (C910)

Elizabeth Burpee, MD, Mountain Area Health Education Center, University of North Carolina School of Medicine, Asheville, NC

Christine Lau, RN LCSW, Mission Health System, Asheville, NC

Objectives

- Consider the physiologic and psychiatric harm to IV drug users who present for recurrent endocarditis in need of repeat valve replacement.
- Analyze the cost to the healthcare system of recurrent cardiac valve replacement surgery for IV drug users with recurrent endocarditis
- Identify the challenges of balancing patient autonomy with justice and fairness

- Consider solutions to the patient and healthcare system problem of repeat endocarditis and need for repeat valve replacement surgery

Background: As a nation we face increasing rates of IV drug use. Our hospitals are experiencing increasingly higher admission rates of IV drug users with recurrent endocarditis and life-threatening complications such as heart failure. Our medical providers find themselves in challenging positions related to the question of repeat valve replacement surgery for IV drug users with recurrent endocarditis. Hospital systems must weigh patient health and safety concerns with the utilization of hospital resources. In addition to helping alleviate significant symptom burden, in-patient palliative care teams are being called on to help patients, families and medical teams negotiate complicated decisions related to repeat valve replacement in these often critically ill IV drug users.

Case Description: This is a 21 year old woman who has been injecting drugs since she was in her early teens. She uses IV opioids and IV methamphetamine. She presented to our hospital with recurrent endocarditis. One year prior to admission, she underwent mitral and tricuspid valve repair for IV drug related endocarditis at a nearby large medical center. On presentation to our hospital, she was critically ill with anasarca, congestive heart failure and ascites. She had excruciating pain to touch, abdominal pain related to ascites and dyspnea with any movement. Our in-patient palliative care service was consulted for pain and dyspnea management while the cardiovascular surgical team evaluated her for possible repeat valve surgery.

Conclusion: The ethical principle of patient autonomy must be weighed against the principles of justice and fairness. Solutions must be sought that protect both patients and healthcare resources. Solutions could include mandatory substance abuse treatment after first valve replacement event or the creation of guidelines by medical societies and hospitals to protect both patient and healthcare resources.

“Home Work”: A Model for Comprehensive, Home-based, Interdisciplinary Perinatal Palliative Care (C911)

Allison Caldwell, MD MSC, University of Tennessee, Memphis, TN

Melody Cunningham, MD FAAHPM, University of Tennessee College of Medicine, Memphis, TN

Katrina Pennington, BSN RN CHPPN, Methodist Le Bonheur Healthcare - Alliance, Memphis, TN

Joanna Lyman, MA CCLS, Le Bonheur Children’s Hospital, Memphis, TN

Ashleigh Young, BA, Methodist Le Bonheur Healthcare-Alliance, Memphis, TN

Carla Norton, MDiv BCC, Methodist Alliance, Memphis, TN

Objectives

- Recognize the benefit of a home-based interdisciplinary perinatal palliative care model.

- Illustrate the adaptability of the interdisciplinary perinatal palliative care team in identifying and attending to a family's individual needs.
- Identify the benefit of early prenatal palliative care involvement, through ongoing work with community and high-risk obstetricians, neonatologists, and community pediatricians.

Background: Congenital and chromosomal anomalies are the leading cause of infant mortality in the US. Prenatal diagnosis is increasingly common, but few maternal fetal medicine (MFM) clinics have palliative care support embedded in clinic. Perinatal palliative care (PPC) offers an interdisciplinary approach to medical, spiritual and psychosocial needs, including anticipatory grief support. This case illustrates a unique home-based perinatal palliative care model that enhances continuity and individualized care.

Case Description: A community neonatologist contacted PPC after seeing a couple who received a prenatal diagnosis of Trisomy 18 in an MFM clinic without access to PPC. Physician members of the PPC team visited the family in their home, where they expressed that their goal for their infant, yet unnamed, was comfort. A birth plan was created including advanced care planning, measures for comfort, discussion of the diagnosis with their toddler twins, legacy building, and the couple's divergent expressions of grief. They enrolled prenatally in an interdisciplinary, home-based hospice program.

Subsequent home visits with both outpatient and inpatient Certified Child Life Specialists aided them in creating avenues for immediate and future discussions of the pregnancy with their children. The family met their hospice nurse, during induction, in the community delivery hospital. She reviewed their birth plan with them and the delivery team. In the early morning, Emma was born, and died in the first hour of life. The family shared this with their hospice team, who supported them through the work of chaplaincy, child life, and bereavement coordination. The team was present for conversations about Emma with her parents and siblings, the day that her father returned to work, and in ongoing remembrance of Emma's lasting legacy.

Conclusion: This case illustrates a model for home-based perinatal palliative care that allows the interdisciplinary team to provide family-focused support seamlessly through pregnancy, an infant's life and legacy.

Dronabinol for the Treatment of Paraneoplastic Night Sweats in Cancer Patients: A Report of Five Cases (C912)

Connie Carr, NP, San Francisco State University, San Francisco, CA

Joshua Fronk, DO, Stanford University, Stanford, CA

Objectives

- Describe prevalence of paraneoplastic night sweats in cancer patients and its impact on QOL.
- List elements of a palliative/integrative medicine approach to care for patients with night sweats related to cancer or cancer treatments.
- Discuss potential mechanisms of action of dronabinol for pharmacologic treatment of night sweats in cancer patients.

Background: Persistent sweating secondary to cancer and/or cancer therapies can significantly impact the quality of life for patients with an oncologic diagnosis. These sweats, which often take place during nocturnal hours, disrupt patients' sleep patterns resulting in both physical and emotional fatigue. The prevalence of night sweats in this patient population occurs 10-48% according to studies. Traditional treatment options for night sweats include hormonal agents, non-hormonal pharmacotherapies, and various integrative practices. This case study examines inclusion of dronabinol for treatment of night sweats in patients with oncologic disease.

Case Description: The first case involved a 67 year old female patient with hemochromatosis and relapsed AML. She presented to the outpatient palliative care clinic with complaints of night sweats for the past several years. She reported waking up nightly to change her clothing and bedding, disrupting restorative sleep. Multiple pharmacologic and non-pharmacologic therapies were attempted in the past, all without success. A literature search indicated nabilone, a synthetic cannabinoid, had been utilized outside the United States for the remission of night sweats in cancer patients. As nabilone is unavailable in the United States, low dose dronabinol was prescribed. After one week on dronabinol therapy, patient reported success stating, "this is the first time I haven't been waking up all drenched." The patient continued to experience resolution of her night sweats which improved her insomnia as well.

Conclusion: A literature review was done to identify management strategies for patients suffering with night sweats. Treatments included both pharmacologic as well as integrative therapies for treatment of this symptom. Although there is limited evidence for use of dronabinol for the treatment of night sweats, we have found success in palliating this symptom in a limited number of patients. Summary of these findings will be presented from members of the palliative care team at Stanford Healthcare.

When Pain is Not Just of the Body (C913)

Divya Chandrasekar, MD, Stanford University, Palo Alto, CA

Ruth Kenemuth, LCSW ACHP-SW, Stanford Health Care, Palo Alto, CA

Felicia Hui, MD, Stanford University, Palo Alto, CA

Objectives

- Recognizing existential suffering manifested as total pain as first described by Dame Cicely Saunders
- Identify the role of non-pharmacologic measures in treatment of total pain involving a multi-disciplinary team

Background: Pain is a complex and individual experience that requires thoughtful assessment and often creative multifaceted treatment approaches. Total pain is a term used to describe not only the physical experience but the psychological, social, emotional, and spiritual components. First coined in the 1960s by Dame Cicely Saunders, the term attempts to describe the all-encompassing nature of pain. Emerging from Saunders' unique background as a social worker, nurse, and physician, the conceptualization and treatment of total pain requires a multi-disciplinary approach.

Case Description: A 30 year old accomplished lawyer diagnosed with cancer six months ago is hospitalized to receive her sixth cycle of chemotherapy. Since being diagnosed, she had complained of generalized whole body pain unrelieved with escalating pharmacologic treatments. Palliative care was consulted for symptom management and unearthed reasons for significant existential suffering. When she started chemotherapy, patient moved in with her parents causing loss of independence and employment with resulting financial instability and guilt over burdening her elderly parents. She felt profound isolation as her prior coworkers formed her social network. Her diagnosis and facing her own mortality, the fear of the unknown, and the discomfort of chemotherapy caused her significant anxiety. She admits to feeling overwhelmed and depressed. She started faltering in her previously robust spirituality and faith as she questions why this illness had afflicted her. Her pain started to improve only through acknowledgement of this existential suffering and multiple visits from a multi-disciplinary team and continued pharmacologic management of symptoms.

Conclusion: The case examines the challenges of recognizing and assessing the various domains of total pain. A multi-disciplinary approach is integral to managing total pain.

Further Specialization in an ICU Leads to Palliative Care Challenges: A Case Approach (C914)

Kevin Day, Emory University, Atlanta, GA

Objectives

- Describe the difficulties in recognizing the process of “dying” in a critically ill patient in the specialized intensive care unit.
- Recognize indications and limitations of antibiotics in patients at the end of life.
- Develop an appreciation for shared decision-making not only with the patient and family, but also with other medical services in a complex, critically ill patient.

Background: Recognizing “dying” in a critically ill patient is becoming increasingly challenging. In an ICU, the notion of withholding life-sustaining therapy can be contradictory to its purpose, possibly resulting in a prolonged dying process where even the use of antibiotics, a relatively low-risk intervention, can affect a clinician’s perceptions. This case highlights not only the complex demands palliative care clinicians face in the ICU, but also highlights the limits of antibiotics.

Case Description: Ms. M was a 36-year-old female with a history of alcoholic cirrhosis admitted for liver failure, multiorgan dysfunction, and signs of sepsis. She was intubated, initiated on dialysis, started on broad spectrum antibiotics, and transferred to our specialized “Liver ICU” for transplant evaluation. Palliative care was consulted on day 14 for family support since she was not a transplant candidate. She developed worsening cardiovascular shock and possible sepsis. Although there were concerns from the palliative care team she was dying, the critical care clinicians were hopeful that resolving an underlying infectious process would reverse her course, and so they continued with increasing use of life-sustaining therapy for another 15 days. On day 26 her status worsened further, and her third course of antibiotics was begun. The palliative care team spoke to all consultants and readdressed the case with the ICU team to determine goals. It was thought a road to meaningful recovery and transplant did not exist. A family meeting was held on day 29, and they elected for hospice care.

Conclusion: Cases such as Ms. M’s are common in our progressively sophisticated management of critically ill patients. Some interventions, such as antibiotics, can lead to a false sense of what is possible. It is important to recognize the limits of modern medicine and to not forget addressing our own goals of care as a part of integrated teamwork.

Methadone, You Broke My Heart: A Case Report of Suspected Methadone-induced Bradycardia (C915)

Joseph Solien, PharmD BCPP CGP, OnePoint Patient Care, Tempe, AZ

James Nicolai, MD HMDC, Casa De La Luz Hospice, Tucson, AZ

Emily Des Champs, ACNP-BC, ACHPN, Casa de la Luz Hospice, Tucson, AZ

Objectives

- Describe the potential mechanism by which methadone can induce bradycardia.
- Incorporate methadone’s potential for causing bradycardia into existing risk versus benefit schema when considering methadone initiation and determining monitoring parameters.
- List ways to manage methadone induced bradycardia.

Background: Methadone is frequently used in palliative care and hospice settings for the treatment of chronic pain. Besides μ -receptor binding, N-methyl-D-aspartate (NMDA) receptor

antagonism and norepinephrine re-uptake inhibition likely contribute to its analgesic effect.

Common adverse effects of methadone, including CNS depression and constipation, are similar to other opioids. Less commonly, methadone may cause clinically significant bradycardia.

Case Description: A 64 y/o male with invasive colonic adenocarcinoma was admitted to our home-based palliative care service. He reported sharp, burning, aching rectal pain that interfered with sleep. After increasing use of oxycodone IR, we determined he would benefit from scheduled methadone and started 5mg nightly. His baseline heart rate was 55-60/min. On day 10, it was 44/min, and although asymptomatic, methadone was replaced with extended-release morphine 15mg nightly. Twelve days later HR was 54/min and no further measurements below 50/min were recorded.

Conclusion: Case reports of methadone-induced bradycardia exist across multiple settings, with wide-ranging consequences from no deterioration in clinical status to lightheadedness with pre-syncope to severe symptoms requiring ICU admission. Structural similarity to verapamil is the leading hypothesis explaining the mechanism for this effect. We used the Naranjo Adverse Drug Reaction (ADR) Probability Scale to gauge the probability of methadone-induced bradycardia. Based on a score of 6, we believe it probable that methadone caused bradycardia in this case.

Though asymptomatic, we felt opioid rotation was warranted.

Though methadone-induced bradycardia is infrequent, it should be considered if unexplained bradycardia occurs. It may be useful to add heart rate monitoring to formal monitoring protocols. If bradycardia occurs, we recommend patient's clinical status guide treatment. For mild, well-tolerated bradycardia, continued use may be reasonable. If severe bradycardia occurs, we recommend opioid rotation. The anticholinergic drug atropine has been previously used to treat symptomatic methadone-induced bradycardia.

When an Ivy League Intellect cannot make Medical Decisions: Managing a Patient with an Autism-Spectrum Disorder (C916)

Valerie Devaney, MD, University of Colorado Anschutz Medical Campus, Aurora, CO

David Nowels, MD, University of Colorado Denver HSC, Aurora, CO

Objectives

- Recognize issues with decision-making capacity in patients with Autism-spectrum disorders (ASD)
- Identify the roles of the Palliative Care and Ethics teams in addressing consent vs. assent

Background: Research is limited regarding the provision of Palliative Care for patients with Autism-spectrum disorder and other mental illness. Close collaboration between behavioral and medical health providers is necessary to address the Palliative Care needs in these vulnerable

patient groups (JPMHN Evenblij 2016). People with mental illness may not process information adequately to project outcomes and communicate goals and wishes in light of those potential outcomes.

Case Description: This 46-year-old female presented (only by the urging of her mother and persuasion of EMT's) with worsening lower extremity swelling. She had previously been identified with Asperger's Syndrome, yet had graduated with an Engineering degree from an Ivy League university. Evaluation revealed extensive thrombotic disease, including saddle embolus and an adnexal mass concerning for malignancy. She could not understand why thrombectomy and adnexal mass biopsy were being offered and encouraged since she felt well. She was found to lack capacity for decision making since she was unable to project future risks and outcomes of her decisions, including the ability to assign an MDPOA ("I'm not unconscious, why would I need a decision maker?"). Her mother was assigned proxy decision maker and chose to pursue the procedures despite the patient's refusal. She was her primary caregiver, but their relationship struggled through lack of emotions on the part of her ASD. Ethics was consulted given patient's lack of assent and facilitated communication and goals of care discussions with patient's mother. She tolerated procedures with general anesthesia and was discharged to home with outpatient follow up.

Conclusion: This case highlights the challenges in providing quality Palliative Care for people who lack capacity due to mental illness yet voice opinions regarding their preferences. Closely working with trusted and appropriately identified proxies and with Ethics, to address consent without assent, is an acceptable course for medical care.

Continuous Methadone Infusions Provide Analgesia in Pediatric Patients with Gastrointestinal GVHD (C917)

Dustin Dillon, MD FAAP, McGaw Medical Center of Northwestern University, Chicago, IL

Sabrina Derrington, MD, Ann and Robert H Lurie Children's Hospital, Chicago, IL

Kelly Michelson, MD MPH, Ann and Robert H Lurie Children's Hospital, Chicago, IL

Joel Frader, MD FAAP, Ann and Robert H Lurie Children's Hospital, Chicago, IL

Objectives

- Recognize the limitations of standard opioid regimens for treating abdominal pain associated with gut GVHD and that methadone is a promising alternative and may require deviation from standard dosing schemes.
- Understand the need for arrhythmia monitoring in patients receiving continuous methadone infusions.

Background: Pain from gastrointestinal graft versus host disease (GVHD) in children can resist usual treatments. Escalating doses of standard opioids may cause adverse side effects and still be

inadequate even with the use of adjuvant analgesics. Methadone, with both long-acting mu receptor agonist and anti-NMDA receptor effects, is a promising alternative. While methadone is typically administered every 8 or 12 hours, we present two pediatric cases with severe gut GVHD-related abdominal pain for which usual methadone dosing failed and continuous infusion improved analgesia.

Case Description: Case 1, a 3-year-old with CML and ALL blast crisis who underwent unrelated donor stem cell transplantation, developed biopsy-proven gut GVHD (stage 4) with GI bleeding and perforation requiring resection and anastomosis. Severe pain persisted despite an aggressive dual-opioid regimen (including scheduled methadone), necessitating continuous sedation with pentobarbital. A continuous methadone infusion was initiated and titrated up to 9mg/hour, improving analgesia and allowing sedation to be lifted.

Case 2, a 3-year-old with AML who underwent unrelated donor stem cell transplant, developed acute GVHD of the skin and gut (stage 4) with bloody stool output and severe abdominal pain. Continuous hydromorphone, fentanyl and ketamine along with scheduled methadone were trialed and increased, but due to worsening pain methadone was made a continuous infusion, eventually titrated up to 24mg/hour for comfort. The patient developed progressive ventricular ectopy secondary to possible AV node inflammatory or infiltrative disease, not thought a side effect of methadone. Patient later died from acute hypoxia leading to cardiac arrest in the setting of multi-organ system dysfunction.

Conclusion: Current understanding of methadone's pharmacokinetics does not explain why some patients may benefit from a continuous infusion. These cases demonstrate a potential role for continuous methadone infusion (with surveillance for cardiac arrhythmias) for severe abdominal pain from gut GVHD refractory to usual treatment.

A Case of Topical Morphine for Palliation of a Painful Pressure Ulcer in Hospice Care (C918)

Sandra Discala, PharmD BCPS, West Palm Beach VA Medical Center, West Palm Beach, FL

Danny Basri, PharmD, West Palm Beach VA Medical Center, West Palm Beach, FL

Christine Vartan, PharmD, West Palm Beach VA Medical Center, West Palm Beach, FL

Abigail Brooks, PharmD, West Palm Beach VA Medical Center, West Palm Beach, FL

David Miller, RN BSN, West Palm Beach VA Medical Center, West Palm Beach, FL

Michael Silverman, MD, West Palm Beach VA Medical Center, West Palm Beach, FL

Objectives

- Summarize the proposed mechanism of action and practical approach to use of topical opioids for pain management of painful pressure ulcers
- Apply current evidence to identify hospice patients who would benefit from topical opioids

Background: The development of pressure wounds is a significant problem for patients at the end of life leading to increased pain and discomfort with a prevalence of approximately 30%. The wounds are associated with multiple comorbidities, immobility, and cachexia and are unavoidable in many cases.

Case Description: A 66 year old male with a history of metastatic prostate cancer to bone, cachexia, anemia, and a painful 4.5x1.9 stage III sacral pressure ulcer was admitted to inpatient hospice. The pain score was 8/10 on the numeric rating scale specifically in the pressure ulcer location. His preference was to remain awake and alert to communicate with his family and loved ones. This led to the avoidance of systemic opioid therapy. He was noncompliant to routine turning which and he continued to put pressure on the sacral ulcer. An interdisciplinary team of physician, pharmacist, and certified wound care nurse were able to honor his wishes of avoiding systemic opioid therapies by implementing topical opioid therapy. Morphine 10mg/1ml injectable solution was added to amorphous hydrogel at bedside in preparation for topical administration. Post opiate application, pain scores were reduced to 6/10, 3/10, 1-2/10, 1/10 at 1, 3, 5, and 24 hours, respectively.

Conclusion: Topical opioid treatment of a veteran was effective in reducing pressure ulcer pain and this approach can be used in similar patients.

Hospice Interdisciplinary Care Challenges for a Female Veteran with Military Sexual Trauma: A Case Report (C919)

Sandra Discala, PharmD BCPS, West Palm Beach VA Medical Center, West Palm Beach, FL

Lynnea Valpatic, LCSW, West Palm Beach VA Medical Center, West Palm Beach, FL

Sarah Solli, MS, US Army, Palm Beach Gardens, FL

Maura Farrell Miller, PhD ACHPN GNP-BC PMHCNS-BC, West Palm Beach VA Medical Center, West Palm Beach, FL

Michael Silverman, MD, West Palm Beach VA Medical Center, West Palm Beach, FL

Objectives

- Recognize military sexual trauma (MST) in women veterans
- Describe practical interdisciplinary approach to the management of the MST patient in hospice care

Background: Caring for Veterans at the end of life can be very challenging as a number suffer from disorders such as Post traumatic stress disorder (PTSD). One area of great concern and where there is very little literature regarding the clinical manifestations is the care of the woman veteran with military sexual trauma (MST) at the end of life. We present our experience with a woman veteran with MST that was admitted to the hospice unit at the West Palm Beach (WPB) Veterans Affairs (VA) medical center.

Case Description: The woman was a 64 year old career US Army Gulf War veteran with a

history of PTSD, depression, MST, alcohol dependence and an adenocarcinoma of the breast s/p mastectomy in 2004 with recurrence in 2010. The veteran failed chemotherapy and she developed lung metastasis and pleural effusions. The hospice staff faced several psychosocial issues including not wanting male staff providing care, displaying overt anger towards the military and VA staff, demonstrating dysfunctional relationships with family and inability to develop ties with hospice staff. Specific interventions included were psychotropics, female staff only, counseling, extensive life review, and allowing her to maintain control. Within 2 weeks, physical symptoms improved and she was discharged to home hospice.

Conclusion: This case demonstrates challenges of a woman veteran on hospice with MST and indicates the need for better recognition and treatment in women veterans.

A Specialized Interdisciplinary Approach in Managing Aberrant Opioid Use among Advanced Cancer Patients (C920)

Tonya Edwards, MD Anderson Cancer Center, Houston, TX

Sriram Yennu, MD, MD Anderson Cancer Center, Houston, TX

Suresh Reddy, MD, MD Anderson Cancer Center, Houston, TX

Joseph Arthur, MD MBCHB, University of Texas MD Anderson Cancer Center, Houston, TX

David Hui, MD MSC, MD Anderson Cancer Center, Houston, TX

Eduardo Bruera, MD FAAHPM, MD Anderson Cancer Center, Houston, TX

Objectives

- identify aberrant drug behavior among cancer outpatients on chronic opioid therapy at a supportive care center using medication compliance events checklist (MCE's)
- discuss the role of a novel core interdisciplinary team approach (cIDT) in improving medication compliance events

Background: Aberrant drug use is an important issue among advanced cancer patients receiving chronic opioid therapy. Harmonizing effective pain management with safe opioid prescribing is essential to reducing the risk. An effective strategy to identify and manage patients at risk for drug related behavior is greatly needed. This case examines the screening and management of patients who exhibit suspected aberrant drug related behavior.

Case Description: Ms. A was a 33 year old patient diagnosed with metastatic sarcoma after presenting with a right lower extremity mass and a cough. She underwent right above-the-knee amputation and was treated with sunitinib. She was referred to the Supportive Care Clinic (SCC) for the management of phantom limb pain and was on hydrocodone. Due to an observed pattern of suspected maladaptive opioid use, she was screened for aberrant drug-related behavior using MCEs [high symptom expression, frequent clinic walk-ins, doctor shopping, demanding particular medications, etc]. Her urine drug screen was inappropriately negative for prescribed

opioids and positive for non -prescribed opioids and benzodiazepines. Ms. A agreed to participate in cIDT, a novel intervention provided by a team consisting of a palliative care trained nurse, psychologist, pharmacist, patient advocate, and a palliative care physician. After about 3 sessions of the cIDT intervention during subsequent clinic visits, her opioid requirement decreased remarkably and she eventually demonstrated opioid adherent behavior. Ms. A now has stable malignant disease and is on surveillance.

Conclusion: This case study highlights the importance of appropriate screening for aberrant drug related behavior in advanced cancer patients and describes the effectiveness of a novel approach in managing aberrant opioid use.

A Case of Refractory Nausea and Vomiting in Patients with Advanced Cancer and Diabetes Mellitus at the End of Life (C921)

Kenichiro Egawa, MD, Kameda Medical Center, Kamogawa, Chiba, Japan

Ryuichi Sekine, MD, Kameda Medical Center, Kamogawa, Chiba, Japan

Objectives

- Recognize possible treatment of refractory nausea and vomiting in patients with advanced cancer and diabetes mellitus.
- Describe the proper use of antipsychotic agents in patients with diabetes mellitus.

Background: Nausea and vomiting may be induced by various factors such as cancer itself, its comorbidities, and its treatment including opioid use for pain control, or psychosocial/existential suffering. Olanzapine is commonly used in Japan for refractory nausea and vomiting, but it is contraindicated for patients with diabetes mellitus. Risperidone is characterized by less impairment of glucose tolerance, thus easy to use in patients with diabetes mellitus.

Case Description: A 63-year-old woman with a history of ovarian cancer and diabetes mellitus was admitted to the hospital for anorexia, severe abdominal pain, dyschezia, and nausea and vomiting. Abdominal computed tomography revealed cancerous peritonitis and intestinal obstruction. A colonic stent was inserted, requiring fasting. Octreotide was given, but her nausea and vomiting persisted. Third-line chemotherapy was commenced, but because of severe myelosuppression and worsening anorexia, it was soon discontinued. The nausea and vomiting persisted despite trials of metoclopramide, prochlorperazine, haloperidol and hydroxyzine. The palliative care team (PCT) was consulted. The physicians considered use of olanzapine, which is commonly used for refractory nausea and vomiting in Japan, but since she had diabetes mellitus its use was contraindicated. After consulting with the PCT pharmacist the decision to use risperidone, another atypical antipsychotic drug, was made based on a case series report¹). Immediately after risperidone was started, the patient's nausea and vomiting resolved.

Conclusion: In Japan, olanzapine is widely used for refractory nausea and vomiting, but it is

contraindicated in patients with diabetes mellitus. For nausea and vomiting in patients with both advanced cancer and diabetes mellitus, risperidone should be considered as an alternative option.

Reference

1) Okamoto Y, Tsuneto S, Matsuda Y, et al. A Retrospective Chart Review of the Antiemetic Effectiveness of Risperidone in Refractory Opioid-Induced Nausea and Vomiting in Advanced Cancer Patients. *J Pain Symptom Manage.* 2007 34(2):217-22.

The Efficacy of using Tapering Dose of Etoricoxib 120mg, 90mg, 60mg, Plus Pregabalin in Cancer Pain Management for Bone Metastases (C922)

Ziad Elchami, MD, International Medical Center, Jeddah, Saudi Arabia

Mohammad Basheer Issa

Ali Mohamadin, MBBCh, International Medical Center Hospital, Jeddah, Makkah, Saudi Arabia

Analy Mirambel

Objectives

- To evaluate the effectiveness of using tapering dose of etoricoxib plus pregabalin in pain treatment of cancer patient for bone metastases.
- To establish a comprehensive approach of patient care using multi-modal medications simultaneously.

Background: About half of all cancer patients experience moderate to severe pain including bone pain that diminishes their quality of life by adversely affecting sleep, social relations and activities of daily living. Pain is more common in the late stages of malignancy. Cancer pain can be eliminated or well-controlled on 80% to 90% of cases by the use of appropriate drugs.

Case Description: Methods: 50 patients were evaluated in Pain Center, International Medical Center, KSA. They all have received an order of tapered etoricoxib: 120mg for 6 days; 90mg for 14 days; 60mg for 7 days. Patients were then sustained to 60mg as per medical condition; plus pregabalin: 150mg per oral two times daily as needed for a period 6 months. Inclusive

Criteria: 26 females, 24 males; ages 36-76 years; mean=56. Exclusive Criteria: pregnant women, children, anyone who is allergic to any of the medication ingredients, history of low blood pressure, patients who have liver or kidney disease or significant cardiac and respiratory depression.

Results: Average improvement of about 60% was appreciated, as per numeric pain scale, within 7 days and sustained for at least 2 months or more, without further adjustment.

Conclusion: Using tapering doses of Cox-2 inhibitor plus pregabalin help in establishing pain relief and decrease breakthrough pain and eventually result in less centralized pain and allodynia.

Utilizing Guided Imagery to Reduce Shortness of Breath and Improve Spiritual Peace in Heart Failure Patient (C923)

Tracy Fasolino, PhD ACHPN FNP, Bon Secours St Francis, Greenville, SC

Adrian Duckett, MDiv, Bon Secours St. Francis Health System, Greenville, SC

Jennifer Ashley, MSN, Bon Secours Health System, Inc., Greenville, SC

Objectives

- Understanding the role of guided imagery for dyspnea management & spiritual peace for patients with heart failure.
- Describe the mechanism of guided imagery as an adjunct therapy for symptom management

Background: Patients with heart failure (HF) are limited in their activities by physiological, psychological, and spiritual elements. These symptoms are related to the failing effects of the heart. Approximately 5.7 million adults in the US have HF. Mounting evidence indicates that various dimensions of spirituality influence overall well-being, depression and psychological distress. While the American College of Cardiology Foundation/American Heart Association guidelines advocate for reducing the symptom burden associated with heart failure, specific recommendations are lacking. Cognitive-behavioral therapy, specifically guided imagery, invoke the relaxation response and has demonstrated reductions in resting metabolic rates, improvement in hemodynamics, and decrease stress in chronically ill patients.

Case Description: A 76-year old female was admitted to the acute care facility for reoccurring exacerbation of HF. Her medical history including HTN, CAD, DM, Stage D (AHA) – Class IV (NYHA), Polypharmacy, and debility. She had received short term rehabilitation and home monitoring to assist with management of her heart failure but her symptom burden had not been reduced. The spiritual element of her well-being had only been minimally addressed. The interdisciplinary team composed of cardiology, nursing, palliative, and spiritual care reviewed her symptom burden and previous interventions. The team agreed that utilizing cognitive-behavioral therapy was the best intervention. The spiritual care member discussed the role of guided imagery with the patient to explore acceptance. Three guided imagery topics were presented to the patient; change of seasons, beach tides, and sanctuary. Pre- and post-measurements (immediately upon completion and 3 hours later) of shortness of breath and spiritual peace were obtained.

Conclusion: The patient agreed to the guided imagery intervention as adjunct therapy. Reports of decreased shortness of breath and improvement in spiritual peace were noted with additional insights offered by the patient. Guided imagery should be further integrated as an intervention for end-stage HF patients by interdisciplinary teams.

Do Organ Transplant Patients Defer Hospice Care When Appropriate because of the “Guilt Factor”? (C924)

Karishma Fatabhoy, DO, Henry Ford Hospital, Detroit, MI

Kristen Chasteen, MD, Henry Ford Hospital, Detroit, MI

Leslie Bricker, MD FACP FAAHPM, Henry Ford Hospital, Detroit, MI

Objectives

- Recognize guilt toward donor as a possible barrier to hospice enrollment in post-organ transplantation patients.
- Identify potential areas of conflict between patient wishes of what is reasonable to go through in order to extend life with the new organ(s) and the transplant team's expectations.
- Describe an interdisciplinary approach to discussing goals of care with post-transplant patients.

Background: Hospice care is underutilized in patients with end-stage liver disease. Less attention has been paid to the barriers to hospice for post-liver transplant patients.

Case Description: A 53 year-old woman with a history of depression and end-stage-liver disease underwent liver and kidney transplantation three months prior to Palliative Medicine consultation. Her post-transplant course was complicated by graft-versus-host disease, an intra-abdominal fluid collection, recurrent pleural effusions, cardiac arrest with successful resuscitation, and two other transfers to the Intensive Care Unit (ICU) for septic shock.

Palliative medicine and transplant psychology were consulted when the patient was on the general medical floor because she expressed interest in enrolling in hospice. During evaluation by both services, she described having a moment of high frustration with medical treatments, but had changed her mind and wanted to continue life-extending treatments and to pursue rehabilitation after discharge. She mentioned guilt regarding receiving donor organs and then "giving up" as one of the reasons for changing her mind. The transplant team also felt that she could continue to improve with treatment and that hospice enrollment would be premature. When she was transferred to the ICU for another episode of septic shock, she again expressed desire to enroll in hospice and was admitted to the inpatient service. Two days later, she met with the transplant team and decided to dis-enroll in hospice. She was discharged to a nursing facility and died 2 weeks later without hospice.

Conclusion: A decision to enroll in hospice is emotionally difficult for the post-transplant patient and the transplant team. Guilt and feeling of obligation to pursue all life-extending measures as long as the donor organs are functioning can be a barrier to enrollment. An interdisciplinary approach involving psychology and the transplant, palliative medicine, and hospice teams can be helpful in navigating these decisions.

The Professor, Mary Ann, Ginger, The Skipper, Guillain-Barre & Palliative Care: Does Palliative Care belong on Guillain's Island? (C925)

Anessa Foxwell, MSN ACHPN CRNP, Hospital of the University of Pennsylvania, Philadelphia, PA

Jill Farabelli, MSW LCSW, Hospital of the University of Pennsylvania, Philadelphia, PA

Objectives

- Discuss the role of palliative care consultation in patients with Guillain-Barre Syndrome.
- Illustrate psychosocial implications and interventions for Guillain-Barre Syndrome.

Background: Palliative care consultation aims to provide specialized symptom management and psychosocial-spiritual support for the population of patients with life-limiting or terminal illnesses. In the hospital setting, patients may suffer from an acute illness wherein full recovery is expected, and the role of palliative care is less clear. GBS is a potentially reversible neurologic disease; however the symptomatology and psychological impact on patients is profound. Patients with newly-diagnosed GBS suffer from devastating functional disability with respiratory complications that may contribute to anxiety, depression, powerlessness, and communication difficulties. Patients with GBS would benefit from routine palliative care consultation, though many experience complete recovery.

Case Description: After enjoying Thanksgiving dinner, a relatively healthy 82 year old woman woke at 4 am to go to the bathroom and felt slightly unsteady; she tried to rise from the toilet, but fell forward hitting her nose against the floor. The patient crawled to her phone and called her son who called 911. She was taken to a community hospital where she was noted over the course of the next eight hours to develop progressively worsening bulbar symptoms and near paresis in extremities. With the onset of these symptoms she was transferred to an academic medical center. She was found to have GBS and neurology predicted full recovery; aggressive care with tracheostomy and feeding tube placement was pursued. The Neurocritical care team consulted palliative care for symptom management as the patient was experiencing such fear that her sons requested sedation. With translation from lip reading services, the palliative care team uncovered unexpected emotions, including the patient's desire to withdraw life support. Family and the critical care team were unwilling to follow these wishes because of the reversible nature of Guillain-Barre Syndrome.

Conclusion: Palliative care may be instrumental to those suffering with GBS by treating psychological symptoms and psychosocial-spiritual distress.

Suicide by Hospice: A Serious Attempt (C926)

Objectives

- Discuss misconceptions of hospice care and opioid use which exist among both laypeople and medical professionals.
- Recognize that patients with unmet mental health needs may seek access to hospice services to meet those needs or in a misguided attempt to end their lives.
- Describe and distinguish between psychiatric conditions ranging from depression to malingering to factitious disorders, and recognize the need for the interdisciplinary team to be able to assess for these conditions.
- Appreciate the benefits of increased integration of hospice and palliative care with psychology and psychiatry.

Background: The hospice interdisciplinary team must be able to recognize patients' psychologic and psychiatric needs and interface with psychiatric services when appropriate. They must also be aware that patients with unmet psychiatric needs who are not terminally ill may seek hospice care in an attempt to meet those needs. This is exacerbated by misconceptions equating hospice care and opioids with hastening death. There have been reports of non-terminally ill patients with substance use disorders seeking hospice services in order to access narcotics. This case presents a disturbing twist: a patient who feigns terminal illness in an attempt at suicide by hospice.

Case Description: Ms. E. is a 59-year-old woman with a stated history of metastatic colon cancer who was enrolled in hospice after presenting to the emergency department overnight with uncontrolled abdominal pain, vomiting, and bloody diarrhea. She stated she had declined conventional treatments. She likewise declined further diagnostics, saying her only wish was to be kept comfortable. She was admitted to the inpatient hospice unit with orders including morphine for pain. The hospice team evaluating the patient became concerned about the lack of supporting evidence for a terminal diagnosis. The patient initially screened negative for depression and suicidality. After continued interviews and psychiatric consultation, the patient admitted that she had sought hospice care with the intent of "ending it all" because it was her understanding that the hospice team would give her lethal quantities of morphine. No evidence of terminal illness was found, and the patient was transferred to the inpatient psychiatry service for further treatment.

Conclusion: The need for interdisciplinary teams to recognize patients' mental health needs is illustrated in this case of a patient with a psychiatric disorder and the belief that hospice care hastens death who attempted suicide by feigning terminal illness.

A Case that's Hard to Swallow (C927)

Luke Hashiguchi, MD, Summa Health, Akron, OH

Objectives

- Describe indications, risks and complications of esophageal stent placement
- Describe a case in which the esophageal stenting was attempted despite no clear indication to do so, which resulted in a poor outcome.
- Recognize timing and diagnosis as important predictors of success in esophageal stent placement
- Describe a general approach to the use of palliative procedures in patients with advanced or serious illness

Background: The primary goal of esophageal stent placement in patients with advanced esophageal cancer is to improve dysphagia, which occurs 70% of the time. The literature regarding palliative stent placement supports improvement of symptoms in over 80% of patients. However, it remains an invasive procedure with risk of severe complications including stent migration, perforation, and hemorrhage at a rate of 10-20%; a 30-40% risk of recurrent dysphagia; and a stent insertion-related mortality of 0-2%.

Case Description: An 81-year-old female with history of widely metastatic breast cancer, largely to spine, and being treated with radiation, fulvestrant, and zoledronic acid, was seen after two days of regurgitation without loss of appetite. An EGD was not done initially as her symptoms were explained to be all due to “disease progression.” A hospice and palliative care were consulted at that time for symptom control and further goals of care discussions. Although the patient’s goals were largely hospice-oriented, the patient desired to “do whatever it takes” to allow her a chance to eat again. Further workup yielded only a swallow study, showing a distal esophageal stricture, and an EGD, where a normal scope or pediatric scope were unable to bypass the stricture. Cardiothoracic surgery was consulted for esophageal stenting, which occurred on the twelfth day of her admission. After stent placement, her regurgitation persisted in the setting of new hiccups, nausea, chest pain, and worsening fatigue. On POD #3, she stated she no longer had an appetite. On POD #5, she declined, enrolled in hospice, and transferred to the acute palliative care unit, where she died three days later.

Conclusion: It is important to ensure that the indication for esophageal stenting is appropriate and the problem addressed in a timely manner. In the setting of end of life care, ‘better late than never’ does not apply.

Transition of Care in Non-Operable Severe Aortic Stenosis: A Collaborative Approach Honoring Patient’s Wishes (C928)

Mohamad Houry, George Washington University, Washington, DC

Tania Alchalabi, MD, George Washington University Hospital, Washington, DC

Elizabeth Cobbs, MD, George Washington University, Washington, DC

Objectives

- Review the epidemiology, pathogenesis, clinical manifestation and natural course of inoperable critical aortic stenosis.
- Present a person-centered model balancing hospice and palliative medicine with patient's wishes.

Background: Severe aortic stenosis affects primarily the elderly, causing debilitating symptoms necessitating frequent hospitalization, poor quality of life, and is considered the most lethal valvular heart disease affecting adults. The following case illustrates a good example of a smooth transition of care for an elderly deemed to have inoperable critical aortic stenosis.

Case Description: 96 year-old woman with a history of HTN, HLD, DM and severe aortic stenosis (AS) with symptoms of dyspnea on exertion and intermittently at rest that required two hospitalizations in the past year. Given her advanced age and comorbidities, patient was deemed to be a non-surgical candidate given an anticipated complicated post-operative course. Patient resides in an independent living facility that provides palliative and hospice services. Patient initially enrolled with hospice, but later decided to opt out this service as she was interested in pursuing additional physical therapy which she successfully completed. She continued to receive palliative treatment for her dyspnea, and to-date she remains satisfactorily functional receiving home health aide services and periodic medical follow up.

Conclusion: Aortic stenosis affects up to 7% of the population above the age of 75. Valve replacement is the only treatment that improves both, survival and quality of life. In one study, the overall mortality in patients with inoperable AS was 88.4% with a mean survival of 1.8 years. During this time period, patients had an average of 4.4 hospital admissions, 52% were admitted to skilled nursing care, and 28% were admitted to hospice care. Because of systemic barriers that exist, cardiac patients in specific receive proportionately less palliative care services. Modern practice, however, has witnessed a paradigm shift whereby hospice and palliative medicine has become a more recognized entity that is assuring better patient-centered outcomes, notably to patients suffering from inoperable and critical AS.

H. pylori as a Cause of Frailty in a Nursing Home Resident: A Collaborative Approach Solves the Mystery and Eases Advance Care Planning (C929)

Mohamad Houry, George Washington University, Washington, DC

Tania Alchalabi, MD, The George Washington University Hospital, Washington, DC

Elizabeth Cobbs, MD, George Washington University, Washington, DC

Objectives

- Present a person-centered model including nursing home providers and gastroenterologists to identify and treat reversible causes of anorexia and weight loss leading to frailty.
- Review the epidemiology, pathophysiology, testing, treatment and outcomes of H. pylori-induced non-ulcer dyspepsia and weight loss leading to frailty.
- Review the Frailty Syndrome with a focus on its definition, work-up and implications.

Background: Anorexia is distressing for patients, families, and healthcare providers. Unintentional weight loss can trigger consideration of feeding tube placement for nursing home (NH) residents. Mounting evidence suggests that feeding tubes do not improve longevity in NH residents with dementia. H. pylori-induced non-ulcer dyspepsia is a treatable cause of weight loss that may be overlooked. This case illustrates the deliberation of specialists and NH providers for a person-centered assessment and treatment of frailty.

Case Description: A 69-year old man with a history of obesity and hypertension was admitted to a skilled NH following a large right middle cerebral artery stroke. From admission, he was noted to have a low appetite and persistent weight loss. By ten months, he had lost 90 lbs. He reported epigastric pain, constipation, bloating and anorexia. Lab work revealed normal TSH and albumin, and negative HIV screening. Abdominal ultrasound and depression screen were normal. Trials of several antidepressants were implemented. Endoscopy diagnosed pan-gastritis. Gastric biopsies revealed H. pylori. He was treated with a 10-day course of a triple-antibiotic regimen. His appetite still did not improve. Despite some memory impairment, the resident was capable of contributing to his medical decision-making and advance care planning. He requested a feeding tube for nutritional support.

Conclusion: NH residents with cognitive impairment and weight loss may present treatment challenges. Several studies reflect inconsistent results of symptom reversal after H. pylori eradication. We will review the epidemiology, pathophysiology, testing, treatment and outcomes of H. pylori induced non-ulcer dyspepsia. We will present a person-centered model including NH providers and gastroenterologists to identify and treat reversible causes of anorexia and weight loss leading to frailty.

Management of Malignant Bowel Obstruction at the End of Life (C930)

Carrie Hyde, MD, University of Arkansas for Medical Sciences, Little Rock, AR

Objectives

- The attendee will learn strategies on how to manage malignant bowel obstruction at end of life

- The attendee will learn commonly used medications and their mechanism of action in the management of malignant bowel obstruction at the end of life

Background: Acute bowel obstruction in malignancy causes significant suffering and limits the utility of symptom controlling medications (ie PO pain medications). There are several treatment options for bowel obstruction, including surgical and non-surgical approaches.

Case Description: Mr. W is a 67 yo AAM with stage IV adenocarcinoma of the pancreas who presents to the VA ER with the chief complaint of abdominal pain, nausea, and vomiting. He had just been discharged from the Oncology service three days prior. He was seen by Palliative Care for goals of care during that admission, and he had opted to enroll in home hospice and discontinue his palliative chemotherapy. He was extremely nauseated and not tolerating anything by mouth, including his pain medication. His pain was constant, cramping, and colicky. He had extreme abdominal distension. A CT scan in the ER revealed ascites and dilated small bowel loops up to 4.5cm and collapsed colon distally with no definitive transition point. He was admitted to the Palliative Care 6E Hospice unit and treated for small bowel obstruction with nasogastric tube to suction, IV fluids at 45cc/hour, Octreotide 100 microgram SC TID, and Dexamethasone 4mg IV qAM, Zofran 2mg IVq4 hours prn. General surgery was consulted, who placed a venting gastrostomy the next day. His symptoms improved markedly and the patient began having small BMs and tolerating limited diet. He continued end of life care in the Hospice Unit and died surrounded by family 23 days after admission.

Conclusion: Make sure to combine a multimodal approach to the management of malignant bowel obstruction and choose the best treatment plan for the patient. Treatments include nasogastric tube, analgesia, light IV fluids, medications that decrease secretions and inflammation, gastrostomy tube, stenting, or surgical resection. Importantly, although opioids may slow GI transit, the benefit outweighs the potential harms at end of life.

Pain that Won't Go Away: Demoralization Syndrome in a Cancer Patient (C931)

Leigh Kinczewski, CRNP, Fox Chase Cancer Center, Philadelphia, PA

Sheila Amrhein, MSW LCSW, Fox Chase Cancer Center, Philadelphia, PA

Marcin Chwistek, MD FAAHPM, Fox Chase Cancer Center, Philadelphia, PA

Objectives

- Recognize the unique clinical condition that is demoralization
- Discuss the biopsychosocial relationship between demoralization and pain.

Background: Demoralization is “a condition that results from existential conflict. It presents with symptoms of hopelessness and helplessness caused by a loss of purpose and meaning in life”.

Proposed diagnostic criteria consist of these components existing for over one month following diagnosis of a medical illness while exacerbating symptoms. Demoralization affects 13-18% of

cancer and palliative care patients. While the relationship between pain, depression and loneliness has been studied, there is scant literature addressing the interplay between demoralization and physical pain.

Case Description: Mr. F is a 74 year-old with metastatic non-small cell lung cancer. He has a large rib lesion causing bony destruction and intractable pain. He ultimately fails extensive medical and procedural management (oral, parenteral, and intrathecal opioids, co-analgesics, radiation, nerve block, high intensity focused ultrasound, cryotherapy, microwave ablation). Late in his care the team learned Mr. F had a wife with emerging dementia who had grown dependent on him and adult children who are absent. A chief contributor to his pain was demoralization rooted in inability to care for his declining wife, loss of identity as a successful businessman, isolation due to lack of presence and support from his children. Upon re-engaging with his children Mr. F's pain was controlled with minimal analgesia. Retrospectively the team pondered that while aggressively treating physical pain Mr. F would have benefited from concurrent psychosocial interventions.

Conclusion: Demoralization is a clinical condition characterized by lack of control and hope, helplessness, and loss of identity. In patients with no obvious psychosocial risk factors yet known reasons for physical pain, existential suffering can go overlooked. Demoralization contributes significantly to global distress and can be prominent when patients express discomfort that is refractory to measures that treat their expressed physical pain. An understanding of pain as a complex experience and a comprehensive biopsychosocial assessment is integral to caring for palliative care patients.

A Painful Dilemma: Synercid Induced Myalgias (C932)

Agnes Koczo, MD, University of Pittsburgh Medical Center, Pittsburgh, PA

Jennifer Pruskowski, PharmD BCPS CGP CPE, University of Pittsburgh School of Pharmacy, Pittsburgh, PA

Robert Arnold, MD FAAHPM, University of Pittsburgh, Pittsburgh, PA

Objectives

- Understand the link between liver disease patients and quinupristin/dalfopristin (Synercid®) induced myalgias
- Recognize the challenges in treating sepsis and myalgias with typical pharmacotherapy agents
- Review the existing literature behind pharmacologic and non-pharmacologic treatments for quinupristin/dalfopristin and drug induced myalgias

Background: Quinupristin/dalfopristin (Synercid®) induced myalgias represent a challenge to the medical management of a patient as the antibacterial agent is often essential to treatment.

Studies report symptoms were only alleviated by reducing or stopping the drug. The proposed mechanism is a result of quinupristin/dalfopristin and bilirubin competing for conjugation and excretion, making incidence higher in patients with direct hyperbilirubinemia.

Case Description: A 23-year-old male with a history of liver transplant was admitted for hepatic artery occlusion causing hepatic necrosis. He developed vancomycin resistant enterococcus (VRE) sepsis due to necrosis-induced bilomas, not amenable to drainage. Cultures showed non-susceptibility to daptomycin and he developed lactic acidosis with linezolid therapy. The infection only cleared with quinupristin/dalfopristin, and due to the persistent source, he remained on this therapy.

Two days following initiation of quinupristin/dalfopristin, he started to develop myalgias, first in his calf muscles, which progressively worsened and involved his entire body. Within four weeks, he regressed from walking 3 laps around the hospital halls to being unable to ambulate secondary to muscle pain and weakness. He was initially treated with opioids but had little relief with a daily OME of 150mg/day. Given his liver disease and sepsis, NSAIDs, acetaminophen, or steroids were not used.

Palliative Care was consulted for therapeutic options. Our interdisciplinary team developed a multimodal treatment plan consisting of Reiki massage, CoQ10 100mg, and Gabapentin 100mg TID for almost two weeks. The patient later developed myoclonus, which was relieved by baclofen 5mg twice daily; other therapies did not improve his myalgias. The patient died before obtaining a second transplant.

Conclusion: Our presentation reviews the suggested mechanism by which quinupristin/dalfopristin causes systemic symptoms in liver disease patients, the treatment challenges which arise in this patient population, and the literature's experience and our multidisciplinary approach to treating drug induced myalgias.

Comatose but Moving: Prognostic Implications and Management of Acute Post-Hypoxic Myoclonus (C933)

Neha Kramer, MD, Rush University Medical Center, Chicago, IL

Objectives

- Differentiate between acute and chronic post-hypoxic myoclonus and their prognostic implications.
- Outline therapeutic strategies for refractory acute post-hypoxic myoclonus.
- Understand the key role that communication and education play in the management of refractory acute post-hypoxic myoclonus.

Background: Accurate prediction of neurological outcome in survivors of cardiac arrest is challenging. Distinguishing between acute post-hypoxic myoclonus (PHM) and chronic PHM (aka Lance-Adams syndrome) has important implications on prognosis and therapeutic approaches. This case illustrates clinical characteristics, pharmacological challenges, and nonpharmacological treatment strategies of acute PHM.

Case Description: RS is a 66-year-old woman with asthma who presented with out-of-hospital respiratory arrest followed by PEA arrest, with return of spontaneous circulation after 10 minutes of resuscitation. She was comatose with intact brainstem reflexes.

Within hours of cardiac arrest, RS developed brief involuntary movements of bilateral upper extremities consistent with myoclonus. EEG showed changes compatible with diffuse anoxic injury without correlating seizure activity. MRI revealed multifocal FLAIR changes secondary to neuronal necrosis. Her myoclonus progressed despite the addition of levetiracetam, valproic acid, phenobarbital, propofol and midazolam infusions.

Goals of care were visited with her family in an interdisciplinary fashion. Education was provided that while the myoclonus may resolve within days, chances of neurological recovery to an independent functional state were low. Some family interpreted the myoclonic movements as voluntary, while others believed they were causing suffering. Family was reassured the movements were nonvolitional and likely not producing discomfort while in a comatose state. RS was transitioned to a comfort-directed approach and died within hours after compassionate extubation.

Conclusion: Acute PHM is clinically distinct from chronic PHM as it occurs in a comatose patient, has onset within hours of cardiac arrest and resolution within days, and has a generalized/bilateral distribution. Acute PHM most often indicates poor neurologic prognosis, though some patients recover a degree of function. The variety of medications used for acute PHM is reflective of the refractory nature and uncertainty about optimal treatment. Addressing caregiver fears and interpretations of acute PHM can be essential in the management of refractory symptoms.

Regaining a Voice: Using Art Therapy to Facilitate Communication and Mitigate Trauma with a Non-Verbal Patient (C934)

Ian Kwok, BA, Icahn School of Medicine at Mount Sinai, New York, NY

Sarah Yazdian, LCAT CCLS, Icahn School of Medicine at Mount Sinai, New York, NY

Rachel Adams, MD, Icahn School of Medicine at Mount Sinai, New York, NY

Objectives

- Identify patients with serious illness and/or limitations in communication who may benefit from medical art therapy.

- Describe different forms of art-making interventions and strategies that can be used to facilitate communication and the processing of trauma/psychological distress in non-verbal patients.

Background: Patients with serious illness, especially those who spend significant time in an intensive care unit, often experience severe psychiatric symptoms that may last well beyond their hospital stay. Art therapy provides a nonverbal approach to the processing of trauma and psychological distress. In settings where the patient's ability to communicate is limited, art therapy can help to stabilize the acute trauma response and support the exploration of complex emotions.

Case Description: WO, a 56-year-old man with past medical history of ESRD (s/p 3 kidney transplants), HCV, and DM, presented with volume overload on 2015/09/14; course complicated by peri-rectal abscess and GI bleeding. He was transferred to the SICU, received a transplant nephrectomy, was initiated on CVVH, and underwent a tracheostomy on 2015/10/23. Palliative Care was consulted for goals of care clarification as part of a SICU/Early Palliative Care initiative. During a family meeting on 2015/11/16, WO stated that his main goal was to regain his voice, even briefly, in order to communicate with his family. He was then referred to art therapy to facilitate communication through non-verbal modalities and address psycho-spiritual distress. Through self-directed art-making, he produced a painting depicting two large eyes with tears streaming down his face, a painting depicting his three daughters, and finally, a pastel drawing of his life in the hospital. WO described through writing the value and emotional content of these pieces. Over time, he demonstrated improved mood/range of affect and developed a coping strategy that promoted relaxation and emotional self-regulation, which carried over from the SICU to his eventual stay in the Palliative Care Unit.

Conclusion: Art therapy can serve an important role in patients with serious illness and/or limitations in communication. This presentation will describe different forms of art-making interventions that can be used for non-verbal patients to facilitate self-regulation in a traumatic setting.

Palliative Sedation Therapy: Dying in Our Sleep or Sleeping to Our Death? (C935)

Drew Lally, MD, University of Louisville, Louisville, KY

Objectives

- Be able to define the interdisciplinary team member's roles in assessing patients for Palliative Sedation Therapy
- Be able to describe complex refractory pain that would warrant Palliative Sedation Therapy

- Be able to distinguish the differences between Palliative Sedation Therapy from Physician-Assisted Dying and euthanasia.

Background: Palliative Sedation Therapy (PST) is the “intentional lowering of awareness towards, and including, unconsciousness for patients with severe and refractory symptoms.”

Evaluation of patients eligible for PST requires coordinated and collaborative assessment by an interdisciplinary team of palliative care specialists. It differs from physician-assisted dying (PAD) and euthanasia in that the intervention is not meant to specifically shorten the patient’s life. Indeed retrospective studies show survival is not worse with PST compared to standard therapy.

Case Description: A 44 year old man with metastatic pancreatic cancer diagnosed seven months prior to entering hospice care had poor pain control despite previous Whipple resection, celiac plexus block, bilateral laparoscopic splanchnicectomies, and standard opiate therapy. He underwent aggressive attempts to manage his pain over the following two months including fentanyl PCA, methadone rotation, and adjuvant ketamine. He was believed to suffer from total pain but was not receptive to chaplain and social work intervention. Once his morphine equivalent daily dose reached greater than 10,000 he requested palliative sedation evaluation. In the face of significant physical decline and a limited life expectancy, he finally accepted intervention from all members of the interdisciplinary team who evaluated his request and agreed with the motivations, goals, and refractory nature of his pain. He was sedated with a midazolam drip and died after 36 hours.

Conclusion: Palliative sedation therapy is an essential intervention that requires the expertise and interdisciplinary approach of a specialized palliative care team. Such an approach is vital given the complexity and intricacies of caring for patients at the end of life.

Neuropsychiatric Symptoms in Serious Medical Illness: Differing Perspectives From Palliative Care and Psychiatry (C936)

Kyle Lavin, MD MPH, University of North Carolina Chapel Hill, Chapel Hill, NC

Alisha Benner, MD, University of North Carolina Chapel Hill, Chapel Hill, NC

Rachel Lipner, DO, University of North Carolina, Chapel Hill, NC

Jason Tatreau, MD, University of North Carolina, Chapel Hill, NC

Rachel Poliquin, MD, University of North Carolina, Chapel Hill, NC

Emily Holmes, MD, University of North Carolina Hospitals, Chapel Hill, NC

Objectives

- Appreciate different practice patterns between palliative care clinicians and psychiatry clinicians in evaluating neuropsychiatric symptoms in the palliative care population

- Understand crucial decision points in the plan of care for treating neuropsychiatric symptoms in the palliative care population
- Suggest a framework for building consensus on best strategies for approaching evaluation of neuropsychiatric symptoms, subsequent treatment, and incorporating goals of care in the palliative care population

Background: Delirium is an extremely common neuropsychiatric complication in the palliative care population. Prevalence varies greatly depending on the population studied and methods used, but range from 13%-88%. Furthermore, anxiety and depression are also common and the overlapping symptoms of these disorders contribute to delirium being under-recognized and misdiagnosed. Delirium is associated with increased mortality, prolonged hospital stays, significant economic impact and emotional burden on both patients and caregivers. Despite the high frequency and large burden of suffering associated with delirium it is substantially under-researched, especially in the palliative care setting. As a result, evaluation and treatment of neuropsychiatric symptoms in the palliative care population varies greatly depending on the specialty of the treating team.

Case Description: Mr. C was a 59 year-old man with AIDS and multiple medical problems admitted for acute renal failure necessitating urgent hemodialysis. Psychiatry was consulted for depression; psychiatry diagnosed the patient with hypoactive delirium and recommended starting olanzapine and melatonin. Subsequently, the palliative care team was consulted. The palliative care team noted mild delirium but was more concerned for depression with apathetic features. Palliative care recommended stopping olanzapine and starting citalopram and methylphenidate. The primary team expressed confusion and frustration due to conflicting recommendations from the two consulting services.

Conclusion: This case highlights the different perspectives that palliative care and psychiatry providers might have when evaluating neuropsychiatric symptoms in the palliative care setting. Further research is required to help standardize effective approaches to diagnosing and treating neuropsychiatric symptoms while being guided by individual patient goals and values.

Malignant Ascites: A Miserable Symptom with Management Challenges (C937)

Kimberly Leake, MD, University of Louisville, Louisville, KY

Tricia Cobler, APRN, Hosparus, Louisville, KY

Brette Conliffe, PharmD, University of Louisville, Louisville, KY

Drew Lally, MD, University of Louisville, Louisville, KY

Objectives

- Describe the causes and proposed mechanisms of malignant ascites.

- Explore the evidence available for diuretics and their limitations in management of malignant ascites.
- Understand the roles of repeat large-volume paracentesis and tunneled peritoneal catheter placement in the treatment of malignant ascites.
- Recognize newer treatment modalities that are currently being researched.

Background: Malignant ascites (MA) causes significant morbidity and occurs in a variety of intra-abdominal and extra-abdominal cancers. Gastrointestinal, pancreatic, ovarian, endometrial and breast cancers account for 80% of the cases of malignant ascites. Additionally, MA generally indicates poor prognosis with an average survival of 20 weeks after diagnosis, except in ovarian cancer patients where median survival is close to 2 years. There is a wide range of symptoms that occur including dyspnea, nausea, vomiting, abdominal pain, early satiety, fatigue, lower extremity edema and reduced mobility. These symptoms significantly impair quality of life and are challenging to manage with many patients requiring repeated paracentesis indefinitely.

Case Description: An 83 year old female with pancreatic cancer and home hospice services presents with recurrent dyspnea relating to malignant ascites. Her disease course has been complicated by abdominal wall and liver metastasis despite previously undergoing chemoradiation and a Whipple procedure. She feels miserable with associated symptoms of dyspnea on minimal exertion, abdominal tenderness, decreased mobility, fatigue and decreased appetite. Temporarily relief is achieved from weekly large volume paracentesis with removal of an average of 5 liters, but her symptoms gradually return. She takes Lasix 40 mg daily without significant improvement in her ascites. Spironolactone 100 mg daily is started. The patient wonders what causes this accumulation of abdominal fluid and what other treatment options are available considering she has to travel to appointments every week for paracentesis.

Conclusion: MA remains a complex problem that poses several treatment challenges. Regarding this case, placement of a tunneled peritoneal catheter (TPC) is a reasonable option given the required frequency of paracentesis if diuretics fail to increase time between repeated paracentesis. Patients' goals of maximizing time at home and increasing control over symptom relief are important considerations. Further clinical evaluation is needed for newer potential treatment modalities.

When a Family Exists Within Two Divergent Cultures: Global Complexities of Perinatal Decision-Making (C938)

Efrat Lelkes, MD, University of Washington, Seattle, WA

Objectives

- Recognize discrepancies between perinatal outcomes globally and thus country-dependent determinants of “best-interest”
- Appreciate the contextual influences, including those of family and the larger community, on complex medical decisions for families
- Understand the intricacies of medical decision-making for non-permanent residents of a country

Background: We ask the parents of our pediatric patients to make impossible decisions. Though they often rely on a multitude of support, we expect for decisions to ultimately be made between the dyad of the physicians and parents. This may not always be true; in some cultures, the extended family and community deliver substituted judgment for medical decisions, superseding the parents' decisions. This larger group may be viewed to hold a more objective view of the best interest for the child. But this assessment may be altered depending on where the child lives. If the decision-making community lives within a different context than the immediate family, do we still honor their judgement of what is best for the child?

Case Description: A family moved to the United States from India on a temporary work visa. When the mother was pregnant with their second child, a fetal echocardiogram demonstrated critical aortic stenosis with poor ventricular function. The parents decided to pursue comfort care for their son; they understood that he would most likely require single-ventricle palliative repair, which they believed would result in unacceptable suffering. At his birth, the baby was vigorous and the parents, surprised, elected to attempt balloon dilatation. After several months of no cardiac improvement, the parents decided to pursue a heart transplant, feeling like this would provide him with an acceptable quality of life. Their family in India convened and determined that, in fact, a heart transplant was not an acceptable option. The parents subsequently took the child home on hospice.

Conclusion: Surrogate judgement for pediatric patients may not rest with parents in all cultures but rather with a larger community. Factors influencing these decisions however may be context-specific, and therefore these decisions may be extraordinarily complex.

The Ethics of End of Life Care in Imprisoned Persons: Challenges and Opportunities for Change (C939)

John Liantonio, MD, Thomas Jefferson University Hospital, Philadelphia, PA

Zachary Klock, BA BS, Thomas Jefferson University, Philadelphia, PA

Molly Hanson, CRNP, Thomas Jefferson University, Philadelphia, PA

Objectives

- Describe the unique challenges facing prisoners at the end of life.
- Understand the greater need for ethical medical care in this vulnerable population

- Describe the issues with medication and opioid management in this population.

Background: In 2014, there were 2,224,400 incarcerated people in the United States according to the U.S. Department of Justice. In 2013, 4,446 inmates died while in custody of local or state prisons. Prison populations have been aging with the number of elderly prisoners increasing by 80% between 200 and 2009. As prisoners age behind bars and rates of death in prison increases, the justice systems often struggles with shifting its emphasis from security to treatment and palliation. Merging the difficulties of end-of-life care with prison health care presents its own unique ethical challenges which will be presented and discussed in this case.

Case Description: A 53 year old male with AIDS and hepatitis cirrhosis was admitted to our hospital from Philadelphia county prison with fever, delirium and pancytopenia. The patient has been in police custody for 7 months for a nonviolent crime and was unable to post bail due to financial constraints. On bone marrow biopsy, he was found to have Hemophagocytic Lymphohistiocytosis (HLH) and was soon admitted to the Medical ICU for worsening respiratory status and soon developed multiorgan failure. Palliative care was consulted for symptom management and it was evident at time of consult that the patient was beginning the dying process as he was unresponsive, apneic and anuric. Following a family meeting, the patient was converted to comfort care. However, due to prison policy, the patient was to remain handcuffed, have limited family visitation and remain under police supervision. The patient died 2 days later restrained and under the supervision of 2 armed guards.

Conclusion: Imprisoned persons are particularly vulnerable when considering dignified end of life care. This presentation will review the literature regarding end of life care in prisoners and provide an opportunity to discuss the medical ethics surrounding the care of this population.

Use of Telehealth in Palliative Medicine: A Novel Technology to Improve Communication (C940)

John Liantonio, MD, Thomas Jefferson University Hospital, Philadelphia, PA

Molly Hanson, CRNP, Thomas Jefferson University, Philadelphia, PA

Beth Wagner, MSN RN ACHPN NP CRNP, Sewell, NJ

Susan Parks, MD, Thomas Jefferson University, Philadelphia, PA

Rachel Reis, RN-BSN CCM, Thomas Jefferson University, Philadelphia, PA

Objectives

- Understand the capabilities of telemedicine in the setting of palliative care
- Describe how hospital systems throughout the country are utilizing telehealth.

Background: As technology becomes available to us in hospital systems, palliative medicine and hospice providers should consider implementing its use in their daily practice. Telemedicine provides a unique opportunity to help improve communication with patients, their families and

their providers. Below is a case describing the use of telehealth in a palliative care patient that helped provide comfort by allowing for communication at the end of life.

Case Description: A 76 year old male with end stage heart failure presented to our hospital with an exacerbation of his heart failure. During the course of his admission he was started on a dobutamine infusion to maintain perfusion and was recommended for hospice care by his primary team. Palliative care was consulted for help with symptom management and to discuss his overall goals of care. The patient expressed that he was distraught and filled with worry for his wife who has severe dementia and was currently admitted to another hospital with a hip fracture. He feared that should he opt for hospice and die, he would never be able to see her again. Through our institution's telemedicine program, we were able to arrange multiple meetings with the patient and his wife to communicate with one another using the technology. Prior to transitioning to hospice care, where he soon died, the patient expressed gratitude to the team for arranging one last visit with his wife.

Conclusion: Palliative medicine providers are indeed experts in communication. Using available technology affords us with the ability to expedite goals of care discussions, advance care planning and simple social interactions which can help improve patient care. This presentation will review the available technology and give providers the opportunity to find new ways to further improve communication.

When Opioids Are Framed (C941)

Santiago Lopez, MD, Northwell Health, New York, NY

Bridget Earle, MD, Northwell Health, New York, NY

Wai Yim Lam, MD, North Shore University Hospital, Manhasset, NY

Objectives

- identifying apprehensions about opioids and how they may not only prevent providers from appropriately treating patients' symptoms but also blind them from considering other diagnoses when adverse effects of these medications are suspected.

Background: The National Consensus Project for Quality Palliative Care developed guidelines to promote quality palliative care. The physical domain emphasizes the multidimensional aspects of pain and the importance of managing them in a safe and timely manner. It evaluates barriers to the use of opioids related to misconceptions of side effects (1). Apprehension about opioids may not only prevent providers from appropriately treating patients' symptoms (2) but also blind them from considering other diagnoses when adverse effects of these medications are suspected.

Case Description: A 36 year old female with metastatic ovarian cancer post chemotherapy and radiation therapy complicated by ileitis/proctitis and a self-contained bowel perforation presented with intractable nausea, vomiting, poor oral intake, and abdominal pain. The patient was treated

with Fentanyl patch and breakthrough Hydromorphone without adverse effects. Due to persistent pain and poor oral tolerance, the patient underwent a procedure where a pelvic abscess was drained and a bowel segment resected. Post-operatively, the patient developed encephalopathy, memory impairment, nystagmus, ataxia, and tachycardia. The primary team attributed the symptoms to opioid treatment. As such, a PCA was stopped but around the clock and breakthrough doses of Hydromorphone were continued. The palliative care team proposed an alternative diagnosis of a neurologic disorder associated with Thiamine deficiency, in the setting of malabsorption/malnutrition, and started supplementation. Neurology evaluation suggested ruling out brain metastasis and seizures. An MRI of the brain suggested Wernicke Encephalopathy. Thiamine deficiency causes Wernicke encephalopathy "...an acute syndrome requiring emergent treatment to prevent death and neurologic morbidity (3)." With treatment, the patient's deficits improved, and she was discharged to rehab.

Conclusion: Avoiding stigma toward and improving knowledge about opioid treatments may facilitate appropriate symptomatic treatment and also treat alternative diagnoses that may cause life threatening situations.

A Time-limited Antibiotic Trial for a Child with an Unknown Neurodegenerative Disorder (C942)

Sarah Luthy, MD MSCS, Boston Children's Hospital, Boston, MA

Marsha Joselow, MSW LCSW, Boston Children's Hospital/ Dana-Farber Cancer Ins, Boston, MA

Christina Ullrich, MD MPH FAAHPM, Dana Farber Cancer Institute, Boston, MA

Objectives

- describe different ways of conceptualizing "medically futile" treatments and identify factors that may affect clinicians' responses to requests for such interventions
- discuss the potential role for time-limited trials in response to requests for physiologically nonbeneficial treatments for children with life-limiting conditions who are not critically ill
- articulate potential components for effective time-limited trails among this patient population

Background: Time-limited trials (TLT) can be used to evaluate the utility of medical interventions. Multiple factors influence whether clinicians initiate TLT and how TLT are developed, although TLTs for children are not well-described in the literature.

Case Description: AB, an 8-year-old boy with developmental regression of unknown etiology, was admitted with rapid developmental decline. During a previous admission, AB had similar symptoms and, despite negative cultures, received antibiotics including vancomycin with

improvement in his speech and motor skills. Absent a diagnosis this admission, his parents requested vancomycin because they attributed his prior improvement to this medication. Our interdisciplinary pediatric palliative care team was consulted to support his family and explore goals of care given his unknown diagnosis and lack of curative therapies. His parents expressed regret over “lost opportunities” for AB, including guilt over not advocating for antibiotics earlier during his previous admission, and wanted to explore all interventions that may cure or improve his condition. Given their goals, we collaborated with his parents and primary team to develop a TLT with vancomycin including laboratory monitoring, oversight by infectious disease and parameters for stopping treatment. Although AB had no evidence of infection, the primary team was willing to initiate the TLT out of respect for his prior experience and his parents’ goal to exhaust all options. If AB did not improve, they hoped the TLT would increase his parents’ prognostic awareness, attend to their decisional regret and facilitate re-evaluation of goals of care. When vancomycin was discontinued because of lack of clinical improvement, his parents expressed gratitude for the TLT, the opportunity to “be heard” regarding AB’s care and their continued hopes for a cure.

Conclusion: Stakeholders identify different potential benefits of TLT. PC clinicians can develop TLT by exploring goals of care, facilitating communication and initiating collaboration among stakeholders.

Just a Little, Just in Time: Ketamine to Address Pain and Existential Suffering in the Final Days of Life (C943)

Perla Macip, MD, Harvard Palliative Care Fellowship, Boston, MA

Justin Sanders, MD, MSC, Harvard Medical School, Boston, MA

Sanjeet Narang, MD, Dana Farber Cancer Institute, Boston, MA

Juliet Jacobsen, MD, Massachusetts General Hospital, Boston, MA

Objectives

- Understand the existing data on the use of Ketamine as an opioid sparing agent for pain control, and for depression and existential suffering at the end of life.
- Identify opportunities to add ketamine for non-pain indications such as depression and existential suffering.
- Describe an approach for using ketamine at the end of life.

Background: Ketamine, an NMDA receptor agonist, is considered one of the World Health Organizations essential drugs for the management of refractory pain, yet is infrequently utilized by palliative care clinicians. Studies of its utility for cancer and neuropathic pain have demonstrated mixed results; case reports, however, suggest that it may relieve depression and existential distress. This case describes the successful strategy of using a low dose ketamine infusion in a dying patient with refractory pain, depression, and existential suffering.

Case Description: Mr. P was a 43-year-old man with relapsed acute myeloid leukemia, treated with allogeneic peripheral blood stem cell transplantation. His post-transplant course was complicated by severe liver and intestinal steroid-resistant graft versus host disease (GVHD). He was initially admitted to the ICU with sepsis and 10/10 abdominal pain in the setting of constipation and GVHD. Imaging ruled out small bowel obstruction and the constipation was treated, but the pain persisted. The palliative care team titrated various opioid infusions, without success.

Mr. P exhibited existential distress with guilt related to feeling like a failure as a husband and father of five children, and frustration regarding his perceived loss of dignity, and threats to self-identity. He was also depressed and withdrawn with psychomotor retardation.

Given extreme suffering from refractory pain, existential distress, and depression we initiated a low dose infusion of Ketamine. Mr. P's pain improved within a few hours of initiation of medication while the total opioid dose was not increased. We observed a lightening of his existential distress and mood as evidence by easier interactions with family. He died comfortably within 24 hours of initiation of Ketamine.

Conclusion: This presentation will review the evidence and techniques for using Ketamine for pain, depression and existential distress. We will also discuss when to consider adding ketamine to the care of terminally ill patients.

Use of Benztropine to Alleviate Extrapyrimalidal Symptoms Developed by an Advanced Cancer Patient Receiving Metoclopramide (C944)

Regina Mackey, MD, UT MD Anderson Cancer Center, Houston, TX

Eduardo Bruera, MD FAAHPM, MD Anderson Cancer Center, Houston, TX

Akhila Reddy, MD, UT MD Anderson Cancer Center, Houston, TX

Objectives

- Recognize extrapyramidal symptoms (EPS)
- Case presentation of patient with extrapyramidal symptoms
- Mechanism of action of benztropine

Background: Metoclopramide is an antiemetic that reduces gastric contents and increases the lower esophageal sphincter tone. Metoclopramide due to its dopamine receptor antagonism can cause extrapyramidal symptoms (EPS) and drug-induced movement disorders (DIMD).

Recognition and prompt discontinuation of metoclopramide is critical in case of development of such adverse effects. We present a case of a cancer patient who had intractable nausea that responded to metoclopramide and then unfortunately developed EPS. Benztropine, an anticholinergic, was initiated which allowed us to continue metoclopramide.

Case Description: A male in his 40s diagnosed with esophageal carcinoma began chemotherapy.

He developed severe nausea that did not respond to ondansetron and antihistamines. Metoclopramide was initiated which relieved his nausea. A few weeks after its use, the patient developed lip smacking and twitching of his tongue which was diagnosed as EPS. Metoclopramide was discontinued and benztropine 1mg taken orally twice daily was initiated. The EPS resolved and the nausea recurred leading to several hospitalizations for vomiting and dehydration. The patient developed progression of his cancer and required placement of a feeding gastrostomy tube. The intractable nausea persisted and he also developed gastroparesis and early satiety. This prompted reinitiating of metoclopramide around the clock along with continuation of benztropine after discussing pros and cons of treatment with the patient and family. The symptoms of nausea and regurgitation promptly resolved. Shortly afterwards, the patient was transferred to palliative care unit for symptom management and transition to hospice care. The patient did not have any recurrence of EPS during the weeks that he was treated with metoclopramide and benztropine.

Conclusion: Metoclopramide is the preferred drug to treat nausea in advanced cancer patients. Intractable nausea may warrant continuation of metoclopramide despite adverse effects such as EPS. The role of benztropine use along with metoclopramide to prevent onset or recurrence of EPS must be further investigated.

Rapidly Progressive Neuro-Cognitive Deficits Related to Multiple Myeloma: The Role of a Multidisciplinary Palliative Care Team (C945)

Sapna Malik, MD, Eastern Maine Medical Center, Bangor, ME

Cosmina Fachiol, MD, Eastern Maine Medical Center, Hampden, ME

Paul Tan, MD, Bangor, ME

James VanKirk, MD, Eastern Maine Medical Center, Bangor, ME

David Martin, DO MS, Eastern Maine Medical Center, Bangor, ME

Objectives

- Describe an unusual initial presentation of a multiple myeloma patient with advanced prostate cancer presenting with subacute onset of neuro-cognitive deficits.
- Explain the role of palliative care in clarifying goals of care and end of life care in a patient with rapidly progressive neuro-cognitive deficits related to multiple myeloma

Background: While most cases of multiple myeloma present with bony complaints or as an incidental finding, this is a case of multiple myeloma with initial presentation of neuro-cognitive deficits with a fluctuating clinical picture. This presentation constituted a diagnostic dilemma, with differential diagnoses including Parkinson's disease, Lewy Body dementia, brain metastases, and paraneoplastic syndrome.

Case Description: 71 year old male, with history of newly diagnosed high grade prostate cancer presented with confusion, hallucinations, slurred speech, tremors and gait disturbance. Extensive neurologic work-up and CAT scans were inconclusive. He later had hypercalcemia, albumin-protein dissociation with abnormal renal function, and IgA Kappa gammopathy. After extensive investigation, his neurological symptoms were ultimately attributed to hyperviscosity syndrome due to multiple myeloma. He was treated with plasmapheresis with initial significant improvement of his neuro-cognitive deficits. He was subsequently treated with bortezomib/dexamethasone, with initial decrease in IgA levels. However, he relapsed with recurrent episodes of confusion, generalized weakness and agitation. Our multidisciplinary palliative care team was involved to assist with goals of care. Because of worsening physical and cognitive functioning, social work and care management were instrumental in securing facility care for the patient. Our team remained involved in his care at the nursing home facility, and the patient eventually died 4 months after onset of symptoms with hospice care.

Conclusion: Neuro-cognitive dysfunction may be the presenting symptom in a patient with hyperviscosity secondary to multiple myeloma. Because of the rapid functional decline, palliative care is instrumental in clarifying goals of care and assuring optimal end of life care for these patients.

Withdrawal of Artificial Nutrition and Hydration in a Child: Religious and Ethical Considerations (C946)

Daniel Mark, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Hilary Flint, DO, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Objectives

- The learner will be able to recognize when a patient and family are under distress regarding their religious values.
- The learner will be able to suggest to a family in distress how involving the interdisciplinary team and religious leaders may be beneficial
- The learner will be able to describe a family's goals in terms of family values and religious values.

Background: Religious and spiritual values often influence medical decision making. During goals of care and advanced directives discussions, it is necessary to take religious and spiritual values into account. The 2009 Conference of Catholic Bishops stated "medically assisted nutrition and hydration become morally optional when they cannot reasonably be expected to prolong life" and that "a person may forgo extraordinary or disproportionate means of preserving life" if those measures "do not offer a reasonable hope of benefit or entail significant burden." The vagaries of that edict in certain health situations require the insight of various disciplines.

Case Description: An 11-year-old boy nonverbal autism and partial seizure disorder is re-admitted for worsening seizures and decreased nutritional intake. Antiepileptic drug therapy is increased, which increases his sedation and worsens his ability to eat, drink, and interact. A nasogastric tube is inserted for enteral feeds. His parents become concerned his quality of life has become minimalized because of his inability to interact. His seizures persist despite aggressive antiepileptic medication administration. His parents question the option of a possible comfort care route and request palliative care and ethics involvement. His parents state that they are strongly Roman Catholic and want to know if it is ethical to remove his nasogastric feeds. Palliative care clarified the parents' goals, ethics weighed the burden of treatment versus loss of quality of life, and chaplaincy arranged a Roman Catholic priest to meet with parents. His parents elected to stop their son's nasogastric tube feedings and brought him home where he died peacefully 8 days later.

Conclusion: A multidisciplinary team including palliative care, ethics, and chaplaincy can be necessary to navigate religious mandates, and ultimately help a family determine its own values during times of crisis.

Support for Bereaved Mothers after the Loss of a Twin (C947)

Rachna May, MD, University of Oklahoma, Oklahoma City, OK

Shellie Gibson, RN, Children's Hospital at OUMC, Oklahoma City, OK

Objectives

- Recognize that bereavement is different in mothers experiencing the loss of a twin compared to the loss of a singleton.
- Understand ways in which palliative care teams can support these mothers during the bereavement period.

Background: It is well known that twin gestations have a higher rate of premature delivery as well as a higher risk of medical complications in the perinatal period (1). In the circumstance of preterm delivery, mothers simultaneously must confront their own health issues and those of two ill children. When one twin does not fare well compared to the other, the situation is further complicated.

Case Description: B.Y. is a 2mo twin with 25 week prematurity and chronic respiratory failure who progresses to end stage renal failure post volvulus repair. Palliative care is consulted to support his mother and aid with advance care planning once it is clear that he is not a candidate for renal replacement therapy. On initial encounter, mom voices understanding of the severity of B.Y.'s condition but remains hopeful that he will recover. Options for advance care planning are reviewed with his mother. In contrast, his brother has extubated and is beginning to tolerate tube feeds with good weight gain. As the twins are in the same room, the difference in their health

status is readily visible. During further encounters, palliative care supports mom by encouraging self-care, open communication with her family, and assisting with memory making. When mom feels the time is correct, she elects to allow natural death and B.Y. passes away peacefully in her arms. Palliative care continues to meet with mom weekly while her other son remains in the hospital. Mom is openly thankful for this support, finding comfort in acknowledgement of the passing of one son and her fears surrounding caring for her surviving son.

Conclusion: The needs of mothers who experience the loss of a twin are different and distinct from mother's experiencing singleton loss (2). Medical providers should remain aware of this and provide support that is mindful to these needs.

Advance Care Planning for a Minor in State Custody without Family Involvement (C948)

Rachna May, MD, University of Oklahoma, Oklahoma City, OK

Alexandra Perry, EdD MEd MA, University of Oklahoma Health Sciences Center, Oklahoma City, OK

Objectives

- Understand the challenges associated with advance care planning when a pediatric patient is in state custody.
- Determine various methods to advocate for patients and support the medical team in these challenging situations.
- Demonstrate how communication among an interdisciplinary team can capitalize on patient, social, and legal supports to improve care planning.

Background: W.B. is an 8 year old male with complex congenital heart disease including transposition of great arteries, total anomalous pulmonary venous return, and pulmonary atresia; and heterotaxy with asplenia. He is status post multiple palliative cardiac procedures over his lifetime and is demonstrating signs of both heart failure and chronic renal failure. He resides at a long term care facility and has been in state custody since birth. There is no identifiable family involvement, leaving medical decision making in the hands of the state. His medical care team asks palliative care to assist with advance care planning as he approaches end of life.

Case Description: W.B.'s medical team does not feel that he would benefit from CPR or transfer to an acute care hospital for escalation of care as his illness progresses. The team notes that W.B. considers the facility to be his home and experiences emotional distress whenever transferred to the acute care hospital. Because of facility bylaws and W.B.'s custody status, a unilateral DNR was not available as an option. Palliative care evaluated W.B. and agreed with the medical team's conclusions. Palliative care submitted a petition to the court to obtain state ordered DNR. After a hearing with representatives for the state, patient, and medical team, a DNR order was not secured. Alternate methods for completing advance care planning were

considered. With the aid of social services, a foster family was identified for W.B. after several months. Foster family voiced understanding of his worsening health and chose to pursue only comfort care. W.B. was discharged to their home with hospice support in place.

Conclusion: Advance care planning in a minor without an invested guardian can present significant challenges and often requires creative thinking by the interdisciplinary team to achieve what is in the best interest of the patient.

Palliative Care Investment Visits: Do They Pay Off? (C949)

Julia McBee, CPNP, Dana-Farber Cancer Institute, Boston, MA

Christina Ullrich, MD MPH FAAHPM, Dana-Farber Cancer Institute, Boston, MA

Objectives

- Identify what a palliative care “investment visit” entails.
- Explore the evolving role of the interdisciplinary pediatric palliative care team for family and team support.

Background: Although it is generally accepted that earlier pediatric palliative care (PPC) is better, the ways in which this occurs is not clearly described.

Case Description: AP was a 5-month old premature female with progressive maxillo-mandibular synynathia and tracheobronchomalacia. She was transferred to our NICU after tracheostomy for craniofacial surgical reconstruction.

The PPC team (PPCT), including MD, NP and SW, was introduced to AP and her family early for added longitudinal support for what was anticipated to be a lengthy and complicated admission. Although her course was initially stable the PPCT (MD, NP, SW together) made regular visits. Though at face value they seemed tedious, these “investment visits” allowed them to deepen their connection and address issues that initially seemed small, but were meaningful and furthered their rapport. For example, AP’s family was from the south and the PPCT found them good comfort food. After a few visits, AP’s mother divulged her worries surrounding opioid use for AP after her partner had died from a heroin overdose.

AP underwent craniofacial reconstruction and her intra-operative course was complicated. She developed bilateral MCA strokes and herniation that would result in profound impairment, if she survived.

The PPCT supported the family and team through their decision to discontinue mechanical ventilation. AP’s family requested the PPCT to advise them on AP’s end-of life-care. The surgical team felt a deep sense of guilt and worried that their management led to her death. The surgeon consulted the PPCT NP for support and recommendations on communication with the family after AP’s death.

Conclusion: Even when a significant role for PPC is not immediately apparent, over time,

investment visits allow development of rapport with family and the entire care team which enables better collaboration and family support at times of unexpected crisis.

The “Sickle Cycle” and the Supportive Role of the Interdisciplinary Palliative Team in the Care of Patients with Sickle Cell Disease (C950)

Julie Mitchell, DO, University of Virginia Health System, Charlottesville, VA

Joshua Barclay, MD MS MSC FACP, University of Virginia, Charlottesville, VA

Julio Silvestre, MD, University of Virginia, Charlottesville, VA

Jesse Dice, MSW LCSW, University of Virginia Emily Couric Cancer Center, Charlottesville, VA

Objectives

- identify co-existing sources of suffering in the sickle cell population.
- discuss methods of integrating interdisciplinary palliative teams in treating sickle cell disease patients.

Background: Sickle cell disease (SCD) affects not only physical, but also emotional, psychosocial, and spiritual aspects of being. Anxiety, depression, and loss of independence are prevalent issues. Recurrent treatment failure is a frequent source of frustration for both patients and healthcare teams, and is often due to an avoidance of addressing psychosocial issues.

Case Description: A 20 year-old female with SCD with a history of vasoocclusive crises, acute chest syndrome, and AVN of the femoral head causing chronic pain, presented with more than 30 hospital and emergency room (ER) visits over a year. Admissions were recurrent and prolonged, frequently requiring readmission within days of discharge. Several issues complicated her care, including limited social support, depression, and PTSD due to prolonged suffering. To address SCD patients such as her, our Palliative Care team developed an interdisciplinary rapid response group. It uses a patient reported comprehensive symptom assessment tool which patients can access, providing real-time alerts about escalating problems to quickly resolve physical, social, and psychological suffering, avoiding ER visits and admissions. To manage pain crises, she can present to the infusion center for fluids, IV nausea and pain medications for rapid relief of suffering. For psychosocial issues, she has met regularly at both outpatient and inpatient visits with a dedicated social worker to address coping, emotional regulation, and depression, and will participate in a peer forum to improve social support. Her progress is discussed in an interdisciplinary group, including doctors, social work, chaplaincy, nursing, interventional pain, and pharmacy. By addressing comorbid conditions in this structured way, she has been able to return to work with significant reductions in emergency room visits.

Conclusion: Managing patients with SCD in a systematic, interdisciplinary approach focusing not only on pain, but also on psychosocial issues can reduce emergency healthcare utilization, and improve overall quality of life.

Fertility Discussions with LVAD/Transplant Candidates in Palliative Care: Improving Our “Baby Talk” (C951)

Alisha Morgan, DO, University of Kansas Medical Center, Kansas City, MO

Lori Olson, MD, University of Kansas Health System, Kansas City, KS

Objectives

- Recognize personal bias, discomfort and barriers to effective discussions of fertility in palliative care.
- Identify 3 communication strategies for fertility discussions in the setting of serious illness.

Background: The interdisciplinary palliative care team is accustomed to challenging and personal discussions with patients and families, both during end-of-life and along with chronic and debilitating illness. The discussion of fertility and pregnancy adds an additional layer of complication. This difficult case highlights the importance of preparing for these talks with patients, particularly in a candidate for LVAD and potential transplant. Oncology guidelines on discussing fertility preservation have increased this communication. However, these guidelines often address types of fertility preservation, but not the physical and psychological impact of pregnancy and child-rearing with severe disease. These discussions are imperative in adults of child-bearing age with chronic and serious illness, regardless of etiology, but with unique challenges in LVAD/transplant patients.

Case Description: A 21-year-old female patient was admitted for evaluation for LVAD and possible heart transplant. She had a complicated past medical history, including depression, anxiety, PTSD, intravenous drug abuse, and was found to have non-ischemic cardiomyopathy with an EF < 20%. Despite being maximized on medical therapies, she had ongoing dyspnea and pulmonary edema. She had a traumatic history, which she wanted to share with the hope of helping others, including loss of two small children and a history of being forced into the sex trafficking industry. She was a G6P2040, with her last delivery about 6 months prior to admission. She was very concerned about being able to have another child and wanted to discuss this with her providers. Given her poor prognosis with her heart failure and her complicated psychosocial history, these fertility and pregnancy discussions were challenging, and at times, insufficient.

Conclusion: This case will help facilitate discussions of fertility in child-bearing age patients with severe illness, with emphasis on LVAD and transplant candidates. It will also highlight the importance of understanding personal bias and recognizing ethical dilemmas in these conversations.

Impact of Palliative Care and Integrated Team Approach in an “Unconventional” Case: The Mystery of the Pelvic Mass (C952)

Pingting Nie, University of California in Los Angeles, Los Angeles, CA

Yue-Ting Lau, University of Washington, Seattle, WA

Katherine Yu, MD, David Geffen School of Medicine at UCLA, Los Angeles, CA

Objectives

- Recognize how early implementation of a patient-centered interdisciplinary team approach optimized the course of a patient without a terminal diagnosis
- Identify opportunities to integrate palliative care for patients with serious illness, high symptom burden, and complex psychosocial dynamics regardless of prognosis.
- Identify elements of a palliative and interdisciplinary team approach to care for a patient with an uncertain diagnosis that is potentially not life-limiting.

Background: Palliative medicine is a growing subspecialty with an evolving role in healthcare; however, constrained by its association with end-of life care and is often incorporated late in a patient's disease trajectory. This case illustrates that patients lacking clear life-limiting diagnosis can benefit significantly from a palliative, integrated team approach, especially if implemented early on.

Case Description: A 65-year-old female without past medical history, no medical care for years given a fear of doctors, presented with acute onset of dyspnea, nausea, vomiting, and decreased urinary output in the setting of 9 months of lower abdominal discomfort and unintentional weight loss. She was initially found to have urosepsis and uremia from chronic obstructive uropathy due to two large abdomino-pelvic masses. Following repeated non-diagnostic IR-guided biopsies, she underwent an exploratory laparotomy with surgical removal of the pelvic masses and adjacent involved organs. Surprisingly, pathology was negative for malignancy and revealed tubo-ovarian abscess of unclear etiology despite exhaustive microbiologic workup. During her complicated 2-month hospital course, the patient faced challenging and complex decisions given the uncertainty of diagnosis and prognosis, necessitating family meetings to clarify focus of care and to build trust for a patient already distrustful of doctors. Palliative care was involved early on to facilitate family meetings, optimize symptom control, and to provide psycho-social support for the patient and her family.

Conclusion: This presentation demonstrates how early involvement of a palliative care interdisciplinary team approach can facilitate and enhance patient care through expedited symptom control and timely psycho-social interventions that not only improve quality of life but the overall course of a patient without a terminal diagnosis. Further establishing and expanding the role of palliative medicine is essential in improving the patient-centered approach of modern healthcare.

Thrown Off Balance: Anticoagulation Challenges in Hospice and Palliative care (C953)

Mona Patel, DO, MJHS Hospice & Palliative Care, New York, NY

Andrew Latchman, MD, MJHS, New York, NY

Objectives

- Recognize that palliative care and hospice patients have altered metabolism of medications such as anticoagulants due to progressive organ dysfunction as their disease advances
- Acknowledge the importance of ongoing assessment of the risks, benefits and burdens of anticoagulants as a patient's clinical condition and goals of care evolve throughout a patient's disease trajectory
- Understand that good provider and team communication among the primary team, consultants, the patient and family is crucial when making decisions regarding continuation or discontinuation of important medications such as anticoagulants

Background: Palliative care and hospice patients typically have multiple comorbidities such as atrial fibrillation, a history of thrombosis or a prosthetic valve and are commonly treated with anticoagulants such as warfarin, low molecular weight heparin or the newer oral agents. Guidelines regarding treatment with anticoagulants however, remain limited due to lack of studies in this population. Considerations include the presence of organ dysfunction, feasibility and preference for blood draws, fall risk, bleeding risk, dietary considerations, drug interactions and cost. Ideally, the initiation of these medications should include a discussion with the patient and/or family about the risks, benefits and burdens surrounding treatment with clear communication among team members regarding the plan of care.

Case Description: A 74-year-old male with pancreatic cancer metastatic to the lungs and liver was admitted to home hospice. Comorbidities included atrial fibrillation treated with warfarin and chemotherapy induced neuropathy. Warfarin was discontinued due to fall risk. Days later, the patient's wife expressed concern to his cardiologist that he was not on warfarin. The cardiologist, not having seen the patient recently, advised to continue warfarin at the patient's prior longstanding dose. As his illness progressed, he developed worsening jaundice and further functional decline. Anticoagulation was not readdressed at this time. Two weeks later, INR was at a critical value of 32. The patient was noted to have hematuria. He was given the option of being admitted to an inpatient unit for observation and management, however, he refused and wished to remain at home. The likelihood of a catastrophic bleed in this patient was significant.

Conclusion: This case highlights the importance for palliative care and hospice providers to continually assess the risks, benefits, and burdens of anticoagulants as a patient advances in their

disease trajectory. Care coordination among providers and ongoing goals of care discussions with the patient and family are crucial.

I'm Not Writing for Narcotics! (C954)

Mehdi Pourmorteza, Durham, NC

Toni Cutson, MD, Durham VA Medical Center & Duke University Medical Center, Durham, NC

Objectives

- Assessing patient awareness to opioid risks
- Prescriber education, rational use of adjuncts, trials of dose reductions, patient contracts, tools to identify at risk patients (Opioid Risk Tool) and use of naloxone prescription
- Targeting high risk patients

Background: Opioid use in patients with addiction or abuse is problematic. Nationwide awareness of deaths associated with opioid use has increased. Medical licensing boards and organizations are issuing strict recommendations for providers prescribing opioids. This contributes to hesitancy in practitioners to treat pain adequately due to medico-legal risks. This case illustrates the concerns of using opioids in an at-risk patient with significant pain and strategies to manage opioids in this population.

Case Description: A 50 year old man with non-Hodgkin's lymphoma and opioid abuse on suboxone presented with groin pain. He underwent herniorrhaphy and post-operatively required increasing opioid medications. Although other providers warned against use of opioids, the palliative medicine team prescribed pain medications. Management strategies included contracts, phone calls, follow up visits, and coordination among providers. He was able to self-wean from the opioids and return to the suboxone program. Months later, he was admitted with septic shock requiring vasopressors resulting in ischemic and necrotic limbs. He underwent multiple amputations. His increasing post-op opioid requirement was challenging, as his physicians were reluctant to prescribe opioids to optimally treat his pain. Prescriber education, rational use of adjuncts, trials of dose reductions, patient contracts, tools to identify at risk patients (Opioid Risk Tool) and use of naloxone prescription will help reduce accidental overdose/misuse deaths.

Conclusion: This case illustrates providers' reluctance to prescribe opioids to treat non-cancer pain in patients with addiction history. It is ethically incumbent on providers to adequately treat pain, even in patients with addiction histories. Given the proper education and tools, the accidental overdose deaths can be reduced.

There's Methadone for the Madness - A Case Report on the Pain Management of Genital Calciphylaxis (C955)

Vinay Rao, DO, Virginia Commonwealth University, Richmond, VA

Jessica Tsukanov DO, Virginia Commonwealth University Health, Richmond, VA

Objectives

- Recognize calciphylaxis as a rare and devastating complication of end-stage renal disease
- Describe the physical symptoms of calciphylaxis that can impair someone's quality of life
- Discuss methadone for treatment of calciphylaxis pain in the setting of end-stage renal disease

Background: Calcific uremic arteriolopathy, better known as calciphylaxis, is a rare and devastating complication of end-stage renal disease (ESRD). It is clinically characterized by painful, purpuric skin lesions and histologically characterized by small artery calcification leading to thrombosis and ischemia. Specifically, calciphylaxis of the genitalia is uncommon and confers a tremendously poor prognosis. Difficult to treat pain and debility lead to significant morbidity. Though evidence supporting specific pharmacological strategies is limited, opioids are often used to achieve improved analgesia.

Case Description: Mr. T is a 59-year-old male with a history of ESRD and biopsy-proven calciphylaxis. During his hospitalization, he complained of 9/10 pain of the genitalia and bilateral lower extremities. On physical exam, he had correlating exquisitely tender purpuric plaques with CT findings consistent with extensive calcifications of his arterial system including the arteries of his genitalia. The patient was diagnosed with acute on chronic lower extremity calciphylaxis with disease progression to his genitalia. For the first 15 days of his hospitalization, the patient received a 25 mcg fentanyl patch and hydromorphone 4mg orally every 4 hours as needed. He required an oral morphine equivalent daily dose (MEDD) of 160 to 250 mg/day. His pain scores on average remained 9/10. Palliative care was consulted. Fentanyl and hydromorphone were discontinued and Methadone 5 mg orally every 8 hours was initiated. Three days later, the patient's pain score decreased to 6-8/10 and he reported better quality of life. His MEDD decreased to 75-135 mg/day. During his last days of life he elected to discontinue dialysis. The patient subsequently became less responsive and died in comfort.

Conclusion: This case report highlights a rare and difficult to treat case of genital calciphylaxis. Specifically, methadone conversion allowed marked decrease in MEDD, improvement in pain scores, and self-reported quality of life.

Lasting Images: Photography & Creative Legacies at End of Life (C956)

Katie Riese, CCLS, University of Wisconsin Hospitals and Clinics, Madison, WI

John Maniaci, BA, University of Wisconsin Health, Madison, WI

Objectives

- Identify and share lasting legacies to promote meaningful bereavement keepsakes through patient and family engagement
- Recognize the importance of unique interdisciplinary engagement and collaboration to provide support and legacies at the end of life for pediatric patients and families

Background: Providing opportunities to engage patients and families in the creation of meaningful legacies at the end of life promotes quality patient and family centered care. With unique interdisciplinary collaboration, such as a child life specialist and children's hospital staff photographer, patients and families can be offered meaningful legacy experiences focused on families' strengths, culture, and spiritual beliefs that they may not have considered. Bereaved parents have shared that they often do not know it is appropriate to cut a lock of hair or take pictures until the possibility is suggested to them and have later regretted not doing so. This case highlights interdisciplinary collaboration to provide lasting images of a meaningful moment during the final days of a child's life.

Case Description: M, a 3 year old, was at end of life in the PICU after herniation due to complications of medulloblastoma diagnosis. M's family expressed their wish to take M home as soon as possible. With support and coordination of the medical, nursing, and palliative care teams, an interdisciplinary approach was coordinated to provide memory keepsakes, a baptism, and family photographs outside of the hospital with extended family members prior to discharge home with a hospice agency. Photographs from the baptism illustrate a sunny Father's Day Sunday on a grassy hillside with M's parents, older sister, and extended family members surrounding M during a baptism orchestrated by the hospital chaplain with support of a Spanish medical interpreter. M was immediately transported home by children's hospital transport ambulance with the hospice agency at home ready to begin continuous care for M and family until M's death.

Conclusion: Interdisciplinary collaboration is essential to engage pediatric patients and families in culturally supportive and meaningful legacy experiences at the end of life.

Opioid Reversal In An Inpatient Palliative Care Consult Patient Can Have Severe And Unexpected Consequences At The End-Of-Life (C957)

Alexander Ritter, MD, Icahn School of Medicine at Mount Sinai, New York City, NY

Olusegun Apoeso, MD, Icahn School of Medicine at Mount Sinai, New York, NY

Stacy Tse, PharmD, James J. Peters VA Medical Center, New York, NY

Objectives

- Highlight the importance of the accurate recognition of opioid-induced respiratory depression and appropriate use of naloxone for opioid reversal in an inpatient hospital palliative care consult setting.
- Discuss the role of the pharmacist as part of the interdisciplinary team to insure appropriate and safe medication administration.

Background: The current epidemic of opioid abuse has dramatically increased the national rate of deaths from opioid overdose. The resulting fear of opioids generated by alarming media coverage and cautionary institutional directives may be negatively impacting the management of hospitalized palliative care patients who benefit from opioids. For example, when palliative care patients taking opioids develop altered mental status, medical teams often empirically treat with naloxone. Inappropriate administration of naloxone can yield serious consequences including nausea, vomiting, agitation convulsions, seizures, and pain. To avoid these complications, clinicians should know how to accurately identify opioid adverse drug reactions. Pharmacists, as part of the interdisciplinary team, can also help educate providers and prevent naloxone administration errors thereby insuring optimal use of this drug.

Case Description: A 71 year old woman with a history of COPD, renal failure, and CABG complicated by recurrent aspiration pneumonia, presented with dyspnea and severe pain. The palliative care team was consulted for symptom control and advance care planning. DNR/DNI orders were completed and hydromorphone 2 mg orally Q6H was started for control of pain and dyspnea. Two weeks into her hospitalization the patient developed severe respiratory distress with desaturation to 80% on room air, altered mentation, and respirations of 44 breaths per minute, the primary team administered naloxone 0.4 mg. The patient experienced severe agitation, pain, and vomiting. Her altered mental status was determined to be due to her pneumonia.

Conclusion: There is wide variation in the accurate identification of respiratory depression, and in the appropriate dosing of naloxone. Opioid reversal with naloxone is not without consequences. Clinicians should rely on physical signs such as hypopnea to determine when altered mental status is likely caused by opioids. Furthermore, pharmacists are well-positioned to help manage appropriate medication use, and should be integrated into hospital-based interdisciplinary teams to optimize patient care.

Existential Suffering: An Under-Recognized Component of Intractable Pain in the Setting of Malignancy (C958)

Melanie Robbins-Ong, DO, Henry Ford Health System, Detroit, MI

Karishma Fatabhoy, DO, Henry Ford Hospital, Detroit, MI

Objectives

- Recognize the role of existential suffering on pain perception
- Identify when medication prescribed for intractable pain is doing more harm than good
- Describe an interdisciplinary approach to pain management for cancer patients

Background: Pain management in the setting of malignancy is often complicated by a combination of physiologic changes and the existential burden of the diagnosis. Poor recognition of existential suffering can contribute to heightened pain sensation and intractable symptoms.

Case Description: A 52-year-old male was admitted for intractable abdominal and back pain one month after diagnosis of metastatic adenocarcinoma of unknown origin. He was discharged on morphine sulfate extended release (MSER) with hydrocodone-acetaminophen for breakthrough. Pain persisted despite medication and cancer treatment. Celiac block and trial for intrathecal pain pump were unsuccessful. He was titrated to MSER 200mg three times daily (TID) with naproxen for breakthrough.

Two years after diagnosis, he was admitted again for pain. Palliative Medicine assisted with pain management. Opiates were rapidly escalated, but he developed narcotic bowel syndrome. The opiate was rotated and dose reduced. Imaging showed stable disease, and he was assured pain wasn't due to cancer progression. Pain improved. He was discharged home on MSER 100mg TID. Soon after, he again required escalation of opiates and was rotated to methadone. He had a pain crisis despite breakthrough medication and was readmitted. Again, opiates were escalated, and he developed hyperalgesia. This time, pain persisted despite opiate reduction, addition of multiple non-opiate medications, and Lidocaine and Ketamine infusions. Psychiatry recommended duloxetine. Integrative Medicine performed acupuncture three times with good relaxation and temporary pain relief. Repeat imaging showed progression of disease. On admission day 14, he met with hospice and enrolled. Pain improved immediately. He was discharged the next day on morphine sulfate 0.5mg/hour continuous IV with 0.5mg IV PCA.

Conclusion: Intractable pain complicated by existential distress may not respond to traditional medication regimens, resulting in rapidly escalated doses and development of adverse effects. An interdisciplinary approach to physical and emotional aspects of pain can relieve symptoms and reduce medication burden.

Donation after Cardiac Death at End of Life in ALS: Planning, Pearls and Pitfalls (C959)

Alva Roche-Green, MD FAAP FACP, Mayo Clinic, Jacksonville, FL

Objectives

- Realize that patients with ALS are viable candidates as donors for organ transplantation.
- Identify the steps in planning for withdrawal of life prolonging care with goal of organ donation
- Pitfalls and Ethical Concerns

Background: Despite advances in medical technology and increased awareness of organ donation and transplantation, the gap between supply and demand continues to widen. Right out of 2013 episode of Grey's Anatomy, the questions of organ donation in amyotrophic lateral sclerosis (ALS) has been controversial for many years due to a fear of transmission of disease to donors by infectious particles or prions. A report in the 2012 Annals of Neurology indicates that patients with ALS are a potential source of tissue for organ transplantation. (12 total cases reported) "The most common cause of death in ALS is respiratory failure secondary to neuromuscular weakness. Although patients with ALS do not meet brain death criteria for organ donation, it is still possible for ventilator-dependent patients to donate according to the donation after cardiac death (DCD) protocol. In fact, a panel of DCD experts deemed that those with end-stage musculoskeletal disease could be potential DCD donor candidates." We will share through a case presentation, our experience with the planning, pearls and pitfalls of this process.

Case Description: DW is a 54 year old diagnosed in 2007 with ALS supported on home ventilator since 2010. In 2015, her family began contemplating goals of care as she became progressively less responsive. In 2016, after determining her current quality of life was no longer consistent with her intended goals, they felt it was time for withdrawal of life prolonging care to allow DW to die a natural death. They acknowledged that DW wanted to be an organ donor. The local OPA and the institutional deeded autopsy program were contacted. DW was admitted for compassionate ventilator wean with planned DCD organ donation and deeded autopsy.

Conclusion: This is a challenging process requiring an interdisciplinary approach while ensuring ethical principles are upheld for the donor and recipient.

Perinatal Hospice - Hospice team and midwives: A Common Thread Pamela Roman, RN, CHPPN, Hospice of the Valley, Arizona (C960)

Pamela Roman, RN, Hospice of the Valley, Phoenix, AZ

Objectives

- Recognize and explore options for birth of a child with a life-threatening condition outside the hospital environment.
- Identify how a hospice team and midwives work hand and hand to educate and support an expectant family during pregnancy, birth, life and death of their child as well as bereavement.

Background: Nationwide the rate of home deliveries is rising. How do hospice teams support a family whose baby has been given a diagnosis of a life-limiting condition in utero and wish to delivery at home? We can do this with the support of midwives, obstetricians and pediatricians. As a medical community, we give parents options for treatment of their child. Shouldn't we do the same regarding the location of their child's birth and likely death?

Case Description: Parents are expecting a new addition to their family. This family has delivered their previous children at home. At 16 weeks gestation, the parents learn that their baby has anencephaly, a devastating diagnosis. After processing this information with their midwife, the family decides to proceed with a home delivery and seeks the support of a hospice team.

Throughout the remainder of the pregnancy, the family, hospice team and midwives meet to discuss the birth plan of care to ensure the family's needs are met. The hospice team provides child life support to the siblings, education regarding expectations at time of delivery and symptom management including use of comfort medications should they be needed as well as resources for funeral planning. Delivery date arrives with midwives attending the parents every need. The hospice team is providing support to the family and cares for the baby for the few minutes of life outside the womb. We celebrate this child's birth, life and death by having our music therapist sing Happy Birthday at parents request and create this child's legacy through pictures, hand/foot prints and meeting siblings and extended family.

Conclusion: As hospice teams we can safely and competently serve families who are delivering babies with life-threatening conditions at home. This holistic approach is by far the best way to serve families experiencing the unimaginable loss of a child.

Development of a Perinatal Palliative Care Program- The Journey of a Twin with Thanatophoric Dysplasia (C961)

Jennifer Ruprich, DO, Helen DeVos Children's Hospital, Grand Rapids, MI

Scott Hawkins, LMSW, Helen Devos Childrens Hospital, Grand Rapids, MI

Sandy Van Brouwer, NP, Helen Devos Children's Hospital, Grand Rapids, MI

Bradd Hemker, MD, Helen DeVos Children's Hospital, Grand Rapids, MI

Objectives

- Learn how to develop and implement a perinatal palliative care program.
- Learn how to develop a birth plan appropriate for families whose babies have no curative options.
- Learn how to develop a comfort care order set to be implemented for symptom management for babies with life-threatening conditions whose parents elect comfort care post-natally.

Background: Comprehensive palliative care beginning in the prenatal period has been identified by medical providers and families as optimal practice for babies diagnosed with life-limiting or

fatal conditions. Perinatal Palliative Care promotes the discussion of fetal diagnosis and potential outcomes, spiritual, psychosocial and emotional concerns of the family, and delivery room planning. Additionally, it addresses the family's goals following birth including memory making, potential discharge home with or without hospice, funeral planning, and bereavement.

Case Description: AR is a 36 year old female pregnant with dichorionic diamniotic twins, of which twin A ("L") was diagnosed prenatally with thanatophoric dysplasia. AR and her husband met with Neonatology and the local perinatal hospice social worker to discuss their decision for no invasive resuscitation after delivery. Though aware of L's fatal diagnosis, the family had significant concerns about L's comfort after birth. L's father inquired about the involvement of pediatric palliative care to help provide this comfort care. AR and her husband met with the Pediatric Palliative Care team prenatally and discussed potential scenarios for delivery, medications to enhance comfort postnatally, and the family's goals for memory making with their other children. The Pediatric Palliative Care Team was present at the delivery and collaborated with the local perinatal hospice program to facilitate these goals.

Conclusion: At our institution, one family's foresight into potential gaps for the care of their child's prenatally diagnosed fatal condition led to the involvement of palliative care within our prenatal population. The success of this involvement prompted development of a new standard of practice for the care of children diagnosed prenatally with presumed fatal conditions. Maternal Fetal Medicine, Neonatology, and Palliative Care work collaboratively with families to develop a comprehensive birth plan and ensure the best possible care for children and families facing these difficult situations.

Whose life is it anyway? Refusing Life-prolonging Treatment with Uncertain Prognosis and Existential Suffering (C962)

Nidhi Shah, MD, Montefiore Medical Center, New York, NY

Ken Meeker, LMSW, Montefiore Medical Center, New York, NY

Say Salomon, MD, Montefiore Medical Center, Bronx, NY

Jessica Nymeyer, MSN, Montefiore Medical Center, Bronx, NY

Serife Eti, MD, Beth Israel Medical Center, Bronx, NY

Fred Amell, Montefiore Medical Center, Bronx, NY

Julia Rutenberg, MD, Montefiore Medical Center, Bronx, NY

Objectives

- Recognize importance of evaluating treatment refusal for reversible chronic illness
- Recognize existential suffering through the 4 domains of existential suffering

Background: Refusal of life-prolonging treatments for reversible medical conditions poses ethical dilemmas for healthcare providers. Caring for young patients with advanced treatable

illnesses and complex psychosocial histories can be especially challenging and requires interdisciplinary approach. In this case, honoring patient's refusal caused particular moral distress for providers, generated patient and provider disagreements, made for an uncertain prognosis and complicated presentation of potential benefits and burdens of treatments.

Case Description: A 32 year-old gentleman with potentially treatable severe Crohn's disease with total colectomy, diverting ileostomy, limited trial of immunomodulatory therapies, admitted to inpatient facility for acute abdominal pain, found to have intra-abdominal wall abscess. He refused intravenous (IV) antibiotics and abscess drainage. He believed his body cannot tolerate any IV without vein rupture, developed "tolerance" to medications and he is "refractory" to all treatments. Though determined to have decision-making capacity, his choice to forego treatment was difficult for his medical team to accept. He expressed that he was "not listened to" by medical teams and believed the only possible outcome for his "terminal" condition was death. Additionally, his history of suicide attempts raised the question of whether this was active suicidal ideation. Psychiatry, palliative care and bioethics were consulted and each team thoughtfully explored patient's understanding of his illness, refusal patterns and decision-making capacity. Patient reiterated that his refusal of life-prolonging treatments was an educated decision based on extensive knowledge of intractable Crohn's disease and not a form of suicide. What mattered most to him was dying at home. The medical team discharged patient home with family support without treatment of abscess.

Conclusion: This case highlights the challenges faced by healthcare providers when patients with treatable advanced chronic illnesses refuse life-prolonging interventions based on values they hold true to themselves. Recognizing and addressing existential suffering is critical to relieve distress. The decision-making path is a process and requires careful exploration of a patient's values, prognosis, decision-making capacity, reasons for refusal and benefit versus burden of treatment options in their overall disease trajectory.

Benefiting from Spiritual Care in the Hospice Setting (C963)

Usman Siddiqui, MD, New York Medical College at Metropolitan Hospital, New York, NY

Objectives

- Understanding the role of spiritual care and the engagement opportunity it provides within patient care
- Describe the significant impact potential when the physician and spiritual care counselor engage together with the patient

Background: The cornerstone philosophy in medicine is to diagnosis, treat and prevent disease. The need to address the patient's quality of life during this process lays at its core. While the goal of palliative care is to improve the quality of life of the patient and their

families, the essence found in spirituality, the patient's ability to seek and express meaning and purpose in life, may help one attain this goal with success.

Case Description: A Hospice and Palliative Medicine fellow accompanied the Spiritual Care Counselor for a home visit to see a 64 year old man with advanced Amyotrophic Lateral Sclerosis (ALS). We had been informed by the patient's wife, visiting nurse, and social worker prior to our visit that the patient, who had a very active life before this condition as a school bus driver for 19 years, had become extremely 'negative, verbally abusive and is agitated quickly'. Upon arrival the patient's wife expressed extreme gratitude to see us together. After requesting to see the patient alone, he stated that the sight of seeing his physician and spiritual counselor together with him at bedside had brought him peace. He then began to openly acknowledge his personality changes, expressing remorse for his behavior. It was not just in response to witnessing his own functional decline but also to the treatment, or lack thereof, that he received. After allowing the patient to thoroughly express himself, he joined us in a prayer which ended by him stating that he vowed to bring about a positive change in his attitude.

Conclusion: This case examines how spiritual support may profoundly impact how patients and their families cope with the effects of an aggressive disease.

When Traditional Medications are not Acceptable: Review of Alternative Therapies for the Treatment of Nausea and Anxiety (C964)

Emily Smith, DO, Grand Rapids Medical Education Partners, Grand Rapids, MI

John Mulder, MD HMDC FAAHPM, Holland Home, Grand Rapids, MI

Objectives

- Identify barriers to acceptance of traditional medicine.
- Identify risks and benefits of selected alternative therapies.
- Explore possible treatment plans using alternative therapies.

Background: There are an increasing number of patients seeking alternative treatments for symptom management. This is an area which has not been a part of traditional medical education. An increasing body of evidence has been compiled to suggest that there are both benefits and risks of using alternative modalities (such as homeopathy, herbal, aromatherapy, acupressure and acupuncture), and as such, providers need to be aware of options and patient preferences when creating treatment plans.

Case description: Ms. P is a 55 year old woman with a recent diagnosis of metastatic breast cancer. Prior to starting chemotherapy and radiation she chose to pursue "natural" remedies, which she described as "any treatment coming directly from a plant." Over the following weeks she developed increasing pain, anxiety and nausea. She was subsequently admitted to an inpatient hospice unit for symptom control, and again would only accept "natural"

treatments. With use of lavender essential oils, ginger, and citrus her symptoms improved to an acceptable level of control.

Conclusion: As a patient centered discipline, palliative medicine providers have an opportunity (if not a responsibility) to explore multiple modalities of treatment consistent with their patients' preferences and values. This presentation will review common alternative therapies for nausea, including risks and benefits, and enable providers to accommodate therapy requests outside of the traditional approach.

Breaking Chains, Creating Bonds: Ethical Caregiving for a Vulnerable Population (C965)

Stephanie Stephens, DO, Virginia Commonwealth University Health, Richmond, VA

Objectives

- Acknowledge the ethical and legal dilemmas involved in treating prisoners.
- Understand the limitations of obtaining consent and when ethical principles must guide decisions.

Background: Treatment for incapacitated patients is challenging in the absence of known next of kin or legal guardian. This is further complicated when the patient is an inmate, part of an extremely vulnerable population. In these situations the only choice is using ethical principles to guide medical decisions.

Case Description: A 74 year old male inmate who had spent the majority of the previous 4 months hospitalized with two ICU stays in the setting of severe anemia was brought to the ED for weakness and refractory pancytopenia. Extensive workup including two bone marrow biopsies had proven inconclusive and his pancytopenia did not respond to therapies during his previous hospitalizations. On presentation he was found to have an NSTEMI along with acute kidney injury. Because of his grave prognosis now with secondary end organ damage hematology recommended hospice care. The patient was not able to provide consent in setting of his Schizophrenia; all previous procedures were done under judicial consent. After consultation with the ethics committee it was decided that using the Best Interests Standard would allow for palliative care as an ethically acceptable option. He was admitted to the inpatient palliative care service with plans for comfort measures only. Eventually his only living relative, a distant niece, was contacted; she agreed with pursuing palliative care and a do not resuscitate order.

Conclusion: An estimated 56% of state inmates have mental illnesses, and as the prison population ages these patients who may lack capacity will have greater medical needs. There is a need to identify these patients upstream to determine goals of care. In patients who cannot consent there is often hesitation to pursue comfort measures as a viable treatment option. When

is it clear that further treatments represent undue burden on that patient, though, opting to ensure a comfortable death is the ethical choice.

Upstream WITH a Paddle: Benefits of Early Triggered Palliative Care Consultation (C966)

Genevieve Stewart, MD MPH, St. Joseph Mercy Hospital, Ann Arbor, MI

Objectives

- Describe current state of evidence related to the positive impact of early palliative care consultation.
- Participants will develop a protocol for using risk stratification to encourage early goals of care discussions with patients who are high risk for death, frequent readmission and poor quality of life.
- Participants will identify process and outcome metrics appropriate to their institution.

Background: Early inpatient palliative care consultations clarify patients' wishes and facilitate a care plan that aligns with their stated preferences (Parikh 2013). This translates to significant improvements in quality of life and cost savings related to decreased unwanted readmissions and long lengths of stay (May 2014). PRISM (Placement Resource Indicator for Systems Management) is an evidence based risk stratification tool that quickly identifies patients at high risk for mortality and/or readmission using a 1 through five scoring methodology. PRISM 1 identifies patients most at risk, with mortality rates of 50% at six months and almost 65% at one year. PRISM 1 patients are also at high risk for readmission with 14.24% readmitted within 30 days of discharge (Cowen 2012). Working with interdisciplinary rounding teams, the palliative care team has developed a protocol to encourage physicians to request consultations on all PRISM 1 patients (approximately 2000 per year) in order to initiate goals of care conversations that may allow patients more meaningful control over treatment decisions.

Case Description: Ms. A, a 77 year old woman with a past medical history significant for end stage COPD, obesity related hypoventilation syndrome and severe pulmonary hypertension, was admitted to the ICU for altered mental status related to hypercapnic respiratory failure. Given her PRISM score of 1, the palliative care team was consulted. The patient and her family were shocked to learn of her poor prognosis. Ms. A changed her code status to DNR and elected a course of post-acute rehabilitation. Three weeks later, she was readmitted with a similar presentation. At that point, Ms. A decided to go home with hospice services and died peacefully several weeks later.

Conclusion: Risk stratification tools provide a means to identify patients at high risk for death,

readmissions, complex symptoms and poor quality of life who benefit from earlier palliative care intervention.

Emergency Department to End of Life at Home - An Alternative Pathway (C967)

Thomas Striegel, DO, Cedar Rapids, IA

Rachel Jones, MD, Carl T. Hayden VA Medical Center, Phoenix, AZ

Objectives

- Utilize prognostication in the emergency setting to identify patients with less than 6 months survivability from acute or chronic disease process
- Recognize efficient communication tools effective in the emergency setting to facilitate primary palliative care discussions
- Recognize the availability of "home with hospice" option in the emergency medicine setting

Background: Emergency departments meet the needs of acutely ill patients on a daily basis, many of whom have progressive, non-modifiable disease process contributing. Patients with dementia at all stages are increasingly cared for in the emergency setting and in fact, emergency admissions increased by 48% between 2008 and 2013. If recognized, knowledge of dementia and other non-modifiable diseases may impact treatment and disposition.

Case Description: This 81 y/o male with dementia (FAST 7c) presented from PCP to ED with delirium on dementia. He had been FAST 6b for previous 2 years, living with his son and his fiancée. This gentleman had recently completed a significant life goal, traveling from Arizona to the Midwest for family events. The trip was highly anticipated and quite successful, but during the return, his decline accelerated, becoming FAST 7c with sacral ulcer development. On the day of contact, he was unresponsive and his PCP sent him directly to the ED. Upon emergency evaluation, treatment for sepsis likely from his decubitus ulcer was initiated with hospitalist admission and palliative medicine consultation pending. We met the patient in the ED and during conversations with MPOA and based on advanced directives and patient previously expressed wishes, the patient would not want treatment and hospitalization, even if his acute illness were reversible. Disposition was altered to embrace comfort measures. With a committed family and responsive hospice, comfort care was arranged for home, creating a nonstandard emergency disposition pathway.

Conclusion: Acute illnesses in dementia patients, or any advanced non-modifiable process, are frequently cared for in the emergency department, often with hospitalization. Recognizing these progressed diseases may lead to discussions that affect care and disposition, perhaps finding new pathways that ease transition and allow for optimal care focused on patient wishes.

Mercy Doula Training and its Incorporation in Medical School Curriculums (C968)

Mehak Swami, DO, University of New York at Buffalo, Buffalo, NY

Kathleen Grimm, MD MHSC, Erie County Medical Center, Buffalo, NY

Sandra Lauer, RN BSN, SUNY at Buffalo-Erie County Medical Cent, Buffalo, NY

Objectives

- Learners will be able to understand the social support needed for a "good death"
- Explain the benefit of incorporating end of life training for medical students
- Understand the implementation of Mercy Doulas at a healthcare facilities can fill voids for patients nearing the end of life

Background: The word "doula" is derived from the Greek term meaning a "women who serves." While birthing doulas have been present for many years, the concept of a Mercy Doula is a new emerging addition for patients nearing end of life. Each day there are elderly individuals who have outlived all or most of their family members and friends, with their only contact being health care professionals. They often are in need of a friend who will accompany them as they make their journey to the afterlife. At Erie County Medical Center, we have incorporated Mercy Doula training with the University of Buffalo medical students to further educate and signify the importance of humanism at end of life.

Case Description: The Mercy Doula program was initiated at Erie County Medical Center after noting the significant amount of patients that were dying alone in the hospital. Our program allows for medical students and community members to come together to provide compassionate care for individuals who are terminally ill. The Doula training consists of 10 hours of training to allow community members and medical students to share their experiences about dying, patient care and emotional experiences. Medical students typically enter the profession with little to no prior experience of dealing with death and often are disengaged from the humanistic and spiritual approach of medicine.

Conclusion: The benefit of having a Mercy Doula allows for a patient to acquire a friend and foster a relationship with someone whose only purpose is to know and be with them in a confidential and caring way. Incorporation of the program into the medical school curriculum allows for students to learn the natural phases of death and empathize further with their patients.

Goals of Care at the Ends of the Earth: Palliative Care for Transnational Patients with Advanced Cancer (C969)

Sean Timpane, MD, Partners Hospitals and Boston Children's Hospital, Boston, MA

Christina Ullrich, MD MPH FAAHPM, Dana Farber Cancer Institute, Boston, MA

Andrew Lawton, MD, Dana-Farber Cancer Institute, Boston, MA

Objectives

- Recognize ways in which transnational patients are a vulnerable population

- Identify pitfalls of using a consumer framework for care at end-of-life

Background: Transnational travel for oncologic therapies in the US is expanding. Many of these patients may have a poor prognosis, having not responded to first line treatments in their native country. They are often seeking new or even experimental treatments at a substantial financial cost in a location far from their sources of support.

Case Description: ND was a 49 year old male from China with refractory multiple myeloma who traveled to the US seeking a novel immunotherapy. He and his wife spent most of their savings in securing a consultation and on travel. He arrived to his first appointment cachectic, dehydrated, and in severe pain and was admitted to the inpatient palliative care unit for symptom control. Based on his functional status, he was a poor candidate for therapy. Nevertheless, the oncology team still offered treatment to honor “what he paid for” with a plan to initiate chemotherapy in the near future. However, with more in-depth exploration of his goals by our palliative care team, it became clear that given the absence of benefit he did not want to proceed. Furthermore, if he was going to die soon, he preferred to return home and be near friends and family. ND expressed no disappointment, only satisfaction that he had tried everything. He also expressed gratitude, surprised and delighted by the interest that we took in him as a person. With urgent preparation, he successfully returned to China.

Conclusion: Transnational patients should not be treated primarily as customers. A consumer framework may lead providers to assume patients would prioritize treatment regardless of potential benefits or burdens. Early palliative care for this vulnerable population is critical, not only to support patients and families who are far from home, but to understand the meaning and role that requested therapies play, thereby promoting treatment in line with their goals.

Paraneoplastic Neurologic Syndrome vs. Delirium: A Case Report (C970)

Robert Toro Santiago, MD, New York Medical College, New York, NY

Fay Rim, MD, Metropolitan Hospital, New York, NY

Objectives

- Recognize the difference between delirium and paraneoplastic neurological syndrome in cancer patients.
- Understand the available treatments options for each condition as it relates to patient outcome.

Background: Altered mental status is a common occurrence in patients with terminal diseases. Delirium and paraneoplastic neurological syndromes (PNS) are two such etiologies. Delirium is a multifactorial complication that encompasses disturbance of consciousness with reduced activity to focus, change in cognition, or the development of a perceptual disturbance that is not better accounted for by a preexisting, established, or evolving dementia. PNS cover a wide range

of diseases and involve the central nervous system and peripheral nervous system. They are immune mediated and associated with paraneoplastic antibodies against intracellular antigens (classical paraneoplastic or onconeural antibodies). The clinical condition includes memory loss, neuropsychiatric disturbances, seizures, and focal neurologic disturbances.

Case Description: A 54 yo woman with esophageal squamous cell cancer with lung metastasis, treating with chemotherapy, was admitted to the MICU for hypotension. Her hospital course was complicated by confusion, mutism, and non-cooperative behavior. She was initially diagnosed with delirium. She then developed focal motor seizures. EEG showed periodic lateralized epileptiform discharges. MRI suggested possible paraneoplastic encephalomyelitis. The patient was treated with symptomatic medication, electrolyte imbalance correction, and analgesia for severe chronic pain, and chemotherapy was stopped. No immunosuppressive therapy was used. The patient returned to her baseline mental status and after treating her for other medical conditions, she was discharged to a subacute nursing facility.

Conclusion: The complexity of cancer related diseases are a challenge for physicians. In many occasions the overlapping of symptoms make difficult the diagnosis of acute syndromes, such as in this case between delirium and PNS. For delirium the treatment consists of correcting the physiological disturbances. For PNS, treatment consists of immunotherapy or tumor-targeted treatment. The prognosis of PNS is worse than the prognosis of delirium even with treatment and no definite treatment has been proposed.

Integrating Hospital Wide Education in Response to Staff Distress and Turnover: The Restorative Power of Education, Group Work, and Debriefing in Light of Caring for Sicker, more Complex Pediatric Patients (C971)

Sandy Van Brouwer, APN, Helen Devos Children's Hospital, Grand Rapids, MI

Scott Hawkins, LMSW, Helen Devos Children's Hospital, Grand Rapids, MI

Bradd Hemker, MD, Helen DeVos Children's Hospital, Grand Rapids, MI

Objectives

- Identify areas of risk for compassion fatigue and moral distress within an acute care setting
- Develop curriculum to address these areas of risk
- Implement pre and post assessment tools to assess efficacy of curriculum in response to these risk areas
- Identify and implement liaisons to provide holistic support for those who are caring for complicated and acutely ill pediatric patients

Background: Approximately 50,000 children cope annually with life-threatening conditions - many of which are due to complex life-long diagnoses (Himmelstein, 2004). These children need

comprehensive, compassionate, and developmentally appropriate care. Pediatric palliative care (PPC) services are a growing presence within US healthcare and have begun to provide an added layer to the comprehensive care for children. However, many children are also cared for by clinicians involved directly with bedside care. Compassion fatigue and moral distress pose risks for these providers as well as to children and families for whom they provide care. Focused education, group work, and intentional debriefing are avenues to help minimize risks so that clinicians can offer desired excellence of care.

Case Description: NR was 6 years old when he presented to intensive care in status epilepticus (SE). He was otherwise healthy without known risk factors. NR's admission was complicated by an extended period of refractory SE despite medically induced comas. He ultimately discharged home nearly 5 months later after receiving a tracheostomy and gastric tube. Clinically, NR no longer had purposeful movements nor responded to his environment in a meaningful way. NR's clinicians expressed great distress. Care was often perceived as futile and prolongation of NR's suffering. NR's parents hoped for sustained quantity of life regardless of interventions. Provider distress cost providers hours of sleep, work absence, and increased risk of turnover. In response to scenarios such as this, the PPC team coordinated with hospital leadership to pursue implementing education, networking, and support.

Conclusion: At our institution, several stories from clinicians prompted leadership to implement a multidimensional approach to providing education, support, and processing for clinicians who provide direct patient care. This approach is intended to assist with restoration and preservation of holistic wellbeing of professionals in order to continue offering comprehensive and compassionate palliative care.

Palliation Versus Dialysis for End-Stage Renal Disease in the Oldest Old: What is Appropriate Care? (C972)

Lyle Walton, MD MHSA, University of Michigan, Ann Arbor, MI

Theodore Suh, MD PhD, University of Michigan, Ann Arbor, MI

Objectives

- Understand the background regarding management of End-Stage Renal Disease (ESRD) with Hemodialysis (HD) among the oldest old in the United States
- Understand current issues related to Medicare benefits for older patients with a diagnosis of ESRD
- Discuss opportunities for the subspecialty of palliative medicine to participate in promoting appropriate high-quality care for this vulnerable population

Background: In the United States, HD is often offered to patients regardless of age, comorbidities, prognosis, or decision-making capacity. However, palliative care remains

underutilized in ESRD despite its documented benefits and advocacy by professional organizations. We present a case highlighting the importance of palliative care in the oldest old with ESRD.

Case Description: A 92-year-old previously independent black female, with medical history significant for multiple comorbidities including hypertension, obesity and CKD/ESRD, was offered HD as terminal therapy. Following initiation of HD she had two emergency department visits, two hospitalizations, and one post-acute care stay. After less than three months of therapy with multiple complications and significant functional decline, she discontinued HD and enrolled in Home Hospice.

Conclusion: In Western countries the median age of those starting renal replacement therapy (RRT) for ESRD ranges from 64 to 73 years and is increasing. This trend also affects the oldest old, with a reported 57% age-adjusted increase in HD for octogenarians and nonagenarians in the US from 1996 to 2003. About 94% of incident cases of ESRD in patients aged 75 years or older start HD despite survival probabilities of 59% at one-year and 43% at two-years. Of these patients, more than 10% die within 3 months of starting HD. Additionally, this population reports decreased quality of life and increased rate of functional decline compared to age-matched controls. These trends highlight an increasing need for palliative care interventions in the oldest old with ESRD. Initiatives focusing on education for providers and families, development of guidelines and protocols for ESRD management, collaboration among medical societies and changes in existing policies will hopefully result in a higher utilization of palliative and hospice care in this population.

Cutting Fentanyl Matrix Patches for Dose Adjustment in Palliative Care Patients (C973)

Johnson Wu, Cleveland Clinic, Cleveland, OH

Armida Parala-Metz, MD, Shaker Heights, OH

Objectives

- To review the methods of delivery for transdermal fentanyl patches.
- To illustrate how cutting Fentanyl matrix patches is safely done for dose adjustment.

Background: There are 2 types of fentanyl transdermal delivery, the reservoir system and the matrix system. The reservoir patch holds the drug in a gel or solution and should never be cut. Cutting a reservoir patch will destroy the rate-controlled drug delivery membrane and may cause sudden release of the drug onto the skin, risking overdose. The matrix patch evenly distributes the medication within a silicone matrix. One-half of a patch will have half the original surface area and deliver half the original dose per hour. Cutting the matrix patch carries less risk of

accidental overdose and potential for abuse.

Case Description: We report 3 patients who successfully cut their fentanyl matrix patches for dose adjustments. In doing so, they were able to avoid wasting their medication and an additional prescription payment.

A 61 year old man with multiple myeloma and cancer-related hip pain, on fentanyl 100 mcg/hr and 50 mcg/hr patches, had pain improvement with radiation. His dose was decreased to 125 mcg/hr by cutting the fentanyl 50 mcg/hr in half, and he successfully tapered down to a fentanyl 100 mcg/hr patch. The second patient is a 69 year old man with multiple myeloma and cancer-related back pain, on fentanyl 50 mcg/hr patch. His pain improved and successfully tolerated cutting his 50mcg/hr patch in half; he was then prescribed a 25mcg/hr patch. The third patient is a 66 year old man with carcinoma of unknown primary and cancer related abdominal pain, on fentanyl 50 mcg/hr patch. His pain improved and also tolerated cutting his patch in half and was then prescribed a 25mcg/hr patch.

Conclusion: Fentanyl matrix patches can be cut for dose adjustment in palliative care patients, in doing so, wasting of medication and additional prescription payments may be avoided.

Methadone Use in Cancer Pain for Hyperalgesia: Guidelines, Safety, and Challenges (C974)

Cheng Zeng, DO, Atlanta, GA

Anna Skold, MD MPH, Southeast Permanente Medical Group Palliative Care, Decatur, GA

Crystal Wright, PharmD, BCPS, Kaiser Permanente, Decatur, GA

Objectives

- Define opioid-induced hyperalgesia and understand proposed mechanisms
- Review guidelines for methadone use in cancer patients
- Identify challenges for treating hyperalgesia with methadone in a clinic setting for patients on high dose opioids

Background: Methadone, as a potent analgesia, has been used for decades to treat pain. However, due to its long and variable half-life, risk of prolonged QTc, and the rise of opioid overdose related deaths, public awareness and the guidelines for methadone use underwent changes.

Currently there is no official guideline regarding the conversion of high dose opioid to methadone. In this environment, continued use of methadone in cancer patients posts specific challenges to the palliative interdisciplinary team in the clinic setting.

Case Description: Ms. K is a 45-year-old female with stage IV breast cancer with diffuse metastases to the chest wall, bone marrow, and spine. She is undergoing chemotherapy and referred to palliative clinic for symptom management. She presented to clinic on transdermal fentanyl 100 mcg/hr every 72 hours, MS Contin 100 mg Q12h, and oxycodone 20 mg 10 times

daily for breakthrough pain. Despite being on 700 mg equivalent of morphine daily and rapid escalation of regimens, she was still experiencing 8/10 pain. She was also on Zometa, systemic corticosteroid, and gabapentin as adjuvant treatments. Suspecting opioid-induced hyperalgesia, rotation to methadone was considered. Screening EKG revealed normal QTc and no significant drug-drug interactions were identified. Fentanyl patch and MS Contin 100 mg were discontinued; 12 hours later she was started on Methadone 7.5mg Q12H and MS Contin taper. The 3-day taper of MS Contin was 60 mg Q12H, then 30 mg Q12H, then discontinued. The palliative pharmacist called every 48 hours after initiation of plan to monitor symptoms. The patient's pain improved from day 1. One week later, her methadone dose was increased to 10 mg Q12H with average pain score of 2-3/10.

Conclusion: This case examines high-dose opioid rotation to methadone in the setting of suspected opioid-induced hyperalgesia via an interdisciplinary team-based approach.