

2017 Annual Assembly of Hospice and Palliative Care

Case Session Abstracts

End of Life Champions Team: A Novel Interdisciplinary Led Initiative for End-of-Life Care in the Emergency Department (TH322A)

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Objectives

- Recognize that there is support for end-of-life care in emergency medicine but there currently lacks a model to provide training for emergency medicine nurses and ancillary staff.
- Describe how an interdisciplinary End of Life Champions Team can provide ongoing training in communication, education on symptom management, end-of-life resources, and support to emergency medicine staff.

Background: The Emergency Nurse's Association supports palliative and end-of-life care in the emergency setting. Currently, there are minimal resources or education available to emergency nurses on end-of-life care. An interdisciplinary team consisting of bedside nurses, charge nurses, social workers, a physician and a Clinical Nurse specialist was developed to address this need. This interdisciplinary group, titled the End of Life (EOL) Champions Team, implemented multiple tools and points of exposure for new and current staff. This included; training on communication and symptom management for each new emergency nurse, a monthly newsletter to all emergency staff offering tips and suggestions for end of life care, and a resource binder. The binder included communication tools, suggestions for end-of-life patient care, supplies for making mementos, and resources for bereavement. The case demonstrates the success of the initiative.

Case Description: A 28 year old with osteosarcoma and brain metastases presented to the emergency department with the acute inability to speak or swallow. Imaging revealed worsening brain edema and the patient's oncologist confirmed there were no further treatment options. The bedside nurse utilized her end-of-life communication training and recognized that the wife and patient's goal was for comfort and to return home. In collaboration with the physician, the decision was made to send the patient home with hospice. Utilizing the resources developed and provided by the EOL Champions Team, the patient was moved to a more comfortable room, physician and nursing discussed plans for symptom management, social work and chaplaincy were contacted to help provide support, and memento handprints were made for the patient's

family. The EOL Champions Team later reached out to staff to provide support and encourage self-care.

Conclusion: The development of an interdisciplinary EOL Champions Team assists in providing support and ongoing education in end-of-life care for new and current emergency staff.

The New "Maximum Life Support." Expanding Use of Adult Extracorporeal Membrane Oxygenation (ECMO): Challenges and Opportunities for Palliative Care (TH322B)

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Objectives

- Prepare families for realistic outcomes of severe critical illness requiring ECMO.
- Describe the role of the interdisciplinary palliative care team in improving the care of patients receiving ECMO, and their families.

Background: Extracorporeal membrane oxygenation (ECMO) is an older technology whose use in adults is surging in the US. Indications and clinical scenarios in which it is being applied are expanding. Patients receiving ECMO are all severely critically ill, and both short- and long-term outcomes and survival remain poor. In some ways, ECMO can be conceived as truly 'maximum life-support.' At our institution, palliative care is consulted for all adult patients who receive ECMO.

Case Description: A 53 year old man collapses in the community from a sudden cardiac arrest due to a myocardial infarction. He receives bystander cardiopulmonary resuscitation efforts and is transported to the hospital where he is placed on ECMO. Despite attempted coronary revascularization, he has a persistent, severe acute ischemic cardiomyopathy and remains dependent on ECMO for over 2 weeks. He is ineligible for advanced heart failure interventions. The palliative care team meets his family on hospital day 2, and participates in several meetings discussing his grave prognosis, lack of options, and recommendation that ECMO be discontinued (allowing the patient to die). His grieving family does not accept that plan, and requests he remain on ECMO indefinitely. Before any resolution of this disagreement occurs, the patient has a large intracranial hemorrhage leading to herniation and death in the middle of the night.

Conclusion: ECMO is a rapidly expanding advanced life-support technology for our sickest patients. Palliative care teams need to become familiar with the technology and unique challenges it provides us, our colleagues, and patients/families as we face increasingly difficult decisions about how to care for these patients.

Collaborative Team Work to Improve Pain and Symptom Management with Internet-enabled Tablets for Hospice Patients with Cancer (TH322C)

Objectives

- Describe the role of team members in multiple sites for collaborative research using tablet technology.
- Describe implementation of tablet technology to allow hospice cancer patients to report their pain in real time.

Background: As part of a Patient Centered Outcomes Research Institute (PCORI)-funded study conducted in Chicagoland, two hospices and a university formed a team with 20 members who represented medicine, pharmacy, nursing, and lay volunteers to recruit patients and their lay caregivers for a week-long stepped-wedge randomized clinical trial. Hospice and palliative care programs lag behind other care settings in use of Internet-based tools for patients to use and contribute their part to high quality, evidenced based practice. This case presentation will describe the processes and outcomes of the teamwork that allowed successful implementation and completion of an experimental study that allowed patients with cancer to report their pain, symptom distress, and beliefs about pain management using an Internet enabled tablet with data transmitted electronically to their hospice nurses, some of whom also received clinical decision support for improving pain control.

Case Description: Active engagement of team members from all three settings was key through all study stages from design, training, patient recruitment and retention, problem solving, and reporting study results. Monthly team meetings in-person or by phone and rotated among the sites was important for ongoing engagement. Lay volunteers were loyal and active team members contributing significantly to the team's success. Between April 2014 and August 2016, the team screened about 3,662 patients with cancer of whom about 1,053 were eligible, 262 patients and 258 lay caregivers consented, and 198 dyads (24% attrition) completed the week-long study. Data analysis is ongoing.

Conclusion: based research that respects and builds on the cultures of hospice/palliative care and science can be highly successful. It is possible to implement tablet technology that allows hospice cancer patients' unfiltered symptom report to their hospice record. We showed that a strong team approach can obtain strong evidence for high quality cancer care at end of life.

Reflections on Mirror Therapy for Phantom Limb Pain Management (TH372A)

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Objectives

- Identify indications for use of mirror therapy for phantom limb pain.

- Examine current literature regarding the efficacy, risks, and benefits of mirror therapy.
- Review interdisciplinary team techniques used in mirror therapy for improving quality of life and promoting disability recovery.

Background: Phantom limb pain, described as a painful sensation perceived in a body part that no longer exists, can significantly impact patients' quality of life, level of disability, and capacity to participate in rehabilitation post-amputation. Phantom limb pain is a poorly understood phenomenon without standard effective pharmacologic or non-pharmacologic treatments. Mirror therapy is a low-risk, non-pharmacologic treatment option for phantom limb pain, implementing illusions or imagery of movement of the non-amputated limb to stimulate the activation of mirror neurons in the brain, thus alleviating perceived pain in the missing limb. This case explores the potential benefits of mirror therapy in the treatment of phantom limb pain.

Case Description: A 49 year old homeless male veteran with metastatic squamous cell carcinoma of the right axilla, chest wall, internal jugular vein, thoracic outlet, ribs and medial clavicle presented with a pulseless right upper extremity and underwent right forequarter amputation. Over the course of his four month hospitalization, he experienced significant phantom limb pain, described as electric shock-like pain in his absent right arm. This was unrelieved by aggressive titration of high-dose opioids. His pain remained 10/10 despite concomitant treatment with neuropathic agents, anesthetics, NSAIDS, and tricyclic antidepressants. An intrathecal pump was placed without significant pain relief. During an interdisciplinary team meeting between a palliative care physician and nurse practitioner, bedside nurse, and an integrative medicine therapist, the integrative therapist suggested the option of mirror therapy. Shortly after initiation of mirror therapy in conjunction with other pharmacologic therapies, his pain began to slowly improve and pharmacologic pain management was weaned significantly. The patient reported an improved sense of wholeness and was able to be transitioned to a rehabilitation center with stable pain control.

Conclusion: Mirror therapy can be considered as a low risk, effective, integrative treatment option for phantom limb pain management in patients post-amputation.

Revival of an Old and Forgotten Opioid to Successfully Treat Phantom Pain (TH372B)

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Objectives

- To understand the pathophysiology, symptom expression, and current treatments of phantom pain
- Case description
- Introduction to levorphanol

Background: Phantom limb pain is an unpleasant sensation that arises in the missing limb after amputation. It can be extremely disabling, severe and intractable. The evidence for use of medications such as botulinum neurotoxin, ketamine, opioids, memantine, gabapentin, and amitriptyline is inconclusive in the treatment of phantom pain.

Case Description: We present a case of a female in her thirties with osteosarcoma of the left humerus, who underwent a forequarter amputation of the left upper extremity. Prior to the surgery her left upper extremity nociceptive cancer pain was managed with hydromorphone extended release 16 milligrams taken once daily, hydromorphone immediate release 4 milligrams approximately 3 times daily, and gabapentin 300 milligrams 3 times daily. After surgery she developed intense phantom pain described as shooting pain and tingling in the left arm area and a strange unexplainable sensation that was extremely distressing. The nociceptive pain that she previously experienced had completely resolved. Hydromorphone along with increase in gabapentin did not provide any relief prompting an opioid rotation to levorphanol 2 milligrams taken every 8 hours. A week later, the patient reported almost complete resolution of the phantom pain. She only had a mild sensation of occasional tingling in the left upper extremity. She did not experience any breakthrough pain and opioid related side effects.

Conclusion: Levorphanol is an underutilized and forgotten synthetic mu-opioid agonist originally developed in the 1940s. It has unique properties of being a more potent NMDA receptor antagonist than methadone and blocks the uptake of both serotonin and norepinephrine like methadone. Unlike methadone, levorphanol does not utilize the cytochrome P-450 system and thereby not subjected to numerous drug interactions and has no associated risk of QTC prolongation. More research on the use of levorphanol (due to NMDA antagonism) for intractable pain syndromes is required. It is time to revive this old opioid.

Suffering after the Cancer is Gone: Transitioning into Survivorship Through Palliative Care (TH372C)

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Objectives

- Recognize the existence of stressors for patients even after receiving curative anti-cancer treatment
- Utilize the interdisciplinary approach of Palliative Medicine to facilitate the transition to survivorship care

- Understand the role of Palliative Care in identifying stressors such as chemical coping and the importance of excellent communication between team members to achieve optimal care.

Background: The transition between palliative care and survivorship is often challenging for many patients who return to their previous lifestyles but continue to experience significant physical, emotional, psychosocial, financial, and spiritual distress. This case illustrates the importance of excellent communication and continuity of care in transitioning patients into life after cancer.

Case Description: A young man in his 30s presented to the Palliative Care clinic with a highly curable cancer. After a few months of treatment, the patient was deemed to have no evidence of disease (NED). Palliative Care continued to follow him for pain management. Initially, the patient reported diffuse body aches associated with chemotherapy which was well-controlled with minimal use of opioids; however, he continued to experience unexplained diffuse joint pains several months after he was initiated on surveillance for his cancer. Over the course of one month, his Morphine Equivalent Daily Dosage doubled and the patient exhibited aberrant behaviors including high emotional distress concurrent with life stressors, inconsistent history regarding medication use, and aggressive drug-seeking behavior including multiple telephone calls to covering physicians after hours requesting refills for his pain medications. As a result of detailed documentation and excellent communication between covering providers, the Palliative Care team was able to identify the patient's chemical coping as a sign of suffering. Given his NED status, Palliative care helped the patient to re-establish care with his primary care physician and Chronic Pain Management clinic where he was titrated off opioids. Lastly, the patient continued to receive supportive counseling and close follow-up through the Social Work department as a part of his transition to survivorship care.

Conclusion: This case demonstrates the profound burdens many patients with cancer continue to carry even after curative treatment and the importance of the interdisciplinary approach of Palliative Care in facilitating the transition to survivorship care.

Comparison of Perinatal Experiences in Recurrent Trisomy 18: Incorporating Fetal-Centered Care into the Birth Plan (FR406A)

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Objectives

- Compare a patient's experience with and without fetal-centered care
- Describe the Interdisciplinary approach to designing the birth plan in pregnancy affected by a life-limiting fetal diagnosis

- Demonstrate improved experience when patient and family is integrated into the birth plan construction

Background: Approximately 3% of pregnancies are complicated by life-limiting fetal diagnoses. Traditionally, families are presented two options: terminate or “do nothing.” Published literature varies widely in estimating the number of women who elect termination (up to 72.5%) or continuation (20-85%); approximately 40% of families offered palliative services continue pregnancy. Perinatal palliative programs embrace shared decision-making and emotional support, removing the “do nothing” approach, while extending time families have with their babies.

Case Description: A 40-year-old Gravida 4 Para 2103 presents to the obstetrics clinic. She has prior history of intrapartum intrauterine fetal demise (stillbirth) at 37 weeks’ gestation complicated by Trisomy 18. Maternal Fetal Medicine recommended against cesarean delivery; she underwent labor induction at 37 weeks’ gestation and her care lacked consultation with neonatology or palliative services.

In her current pregnancy, prenatal testing confirmed recurrent Trisomy 18. The patient entertained pregnancy termination, but later reflected, “I wanted to have what I didn't have with [my first daughter]. I wanted to hold her alive, see her open her eyes, hear her voice, feed her if possible.” The patient, Neonatologist and Obstetrician designed an interdisciplinary birth and neonatal comfort care plan to include elective primary cesarean delivery, bereavement and chaplain services, and possible hospice. She underwent a scheduled cesarean delivery at 37 weeks’ gestation, delivering a live infant. The patient reflected, “I was so grateful for the chance not to just meet her, but for her to live to whatever potential that may be...I wanted to be able to look back and know she lived whatever her little body chose to live naturally. I felt [my first daughter] didn't get that chance.” The family had 40 living hours with their daughter.

Conclusion: This case demonstrates that incorporating interdisciplinary, fetal-centered care into birth/care plans for pregnancies with life-limiting fetal diagnoses improves family experiences while decreasing regret.

“We only want your help with the narcotics”: A Case of Palliative Care Consultation in the Setting of High-risk Pregnancy (FR406B)

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Objectives

- Describe assessment and management of total pain in a patient receiving high-risk obstetrics care.
- Recognize opportunities to partner with high-risk obstetrics to provide holistic supportive care for select complex patients.

Background: Palliative care (PC) consultation in the antenatal/perinatal setting has been documented as expert support in medical decision-making, clarifying goals, and parental grief and bereavement. (Denney-Koelsch 2016) However, potential benefits of interdisciplinary PC have not been well described in the setting of high-risk pregnancy care, further upstream. Similar to other high-risk care settings with potential positive outcomes (e.g. mechanical circulatory support, bone marrow transplantation) does PC have a role in early consultation in high-risk obstetrics?

Case Description: A 22-year-old G3P0111 with twin gestation (16 weeks, 0 days by last menstrual period) was admitted to the hospital labor and delivery unit with 2 days of severe, acute right lower quadrant abdominal pain. Ultrasound demonstrated 1 viable and 1 nonviable twin, with the deceased fetus tightly positioned in the uterine horn causing extreme physical pain for this mother. The hospital acute pain service was unavailable for consultation. Therefore, the PC service received a hesitant request to help specifically with pain management unresponsive to escalating opioid doses. Using a PC approach that emphasizes participation by all interdisciplinary PC clinicians (physician, social work, chaplain, pharmacist), the team found evaluation of this patient's physical pain yielded distress related not only to her medical pathophysiology (nonviable fetal tissue in the uterine horn) but also psychosocial issues (marital stressors, lack of resources, grief from prior spontaneous abortions) spiritual issues (does God want her to become a mother), and ethical issues (medical decision making regarding surgical removal of nonviable fetal tissue would threaten viable fetus). Through the PC holistic approach, total pain improved and opioid doses could be lowered significantly. The patient and her husband received helpful support in medical-decision making regarding the remaining viable pregnancy.

Conclusion: This case presents a positive role for interdisciplinary PC consultation in alleviating total pain in the setting of a high-risk pregnancy.

Bridge to Nowhere?: Short-Term Prostaglandin Infusion Outside of the Hospital in Infants with Inoperable Congenital Heart Defects at End of Life (FR406C)

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Objectives

- Describe the role of prostaglandin infusion in newborns with ductal-dependent congenital heart defects.
- Identify the current limitations on end-of-life options for these infants due to restrictions on the use of prostaglandin infusion.
- Describe the use of palliative prostaglandin infusion outside of the hospital as a means to fulfill end of life preferences in infants with ductal-dependent congenital heart defects.

Background: Prostaglandin infusion is a clinically recognized pharmacological bridge to reparative surgery or transplant in newborns with cyanotic congenital heart disease. By preventing closure of the ductus arteriosus, prostaglandin infusion allows for the continued mixing of left and right circulations, and therefore survival, while awaiting surgical repair. If palliative surgery or transplant is not an option or is declined, the prostaglandin is eventually withdrawn. Since prostaglandin use is typically restricted to the ICU setting, it is usually withdrawn there or upon arrival to an end-of-life destination. This scenario allows the family little time with the infant outside of the hospital prior to death. The literature describes home infusion of prostaglandin as a bridge to surgery, but not for palliative use outside of the ICU in preparation for end-of-life. Similarly, home milrinone infusion is used as a palliative intervention for adult patients with inoperable end-stage heart disease.

Case Description: The short-term use of prostaglandin as palliative treatment outside of the hospital, allows families to spend time with their newborns prior to end of life. We present three cases in which newborns with ductal-dependent congenital heart disease, who were not surgical candidates, were discharged to a free-standing inpatient hospice unit and continued on prostaglandin infusions with minimal monitoring. The infusions were continued unchanged via PICC, ranged from 12-48 hours in duration, and were provided by the transferring hospital pharmacy due to inability to obtain the medication from outside infusion companies. Each case demonstrated fulfillment of parents' preferences regarding the end-of-life experience, effective use of IV medications for symptom management, and multi-disciplinary support. Death occurred from 12 hours to 10 days after discontinuation of prostaglandin.

Conclusion: Short-term continuation of prostaglandin infusion outside of the hospital for newborns with inoperable ductal-dependent congenital heart defects is a feasible option to fulfill end-of-life preferences for families.

Is rapid opioid de-escalation in cancer-induced bone pain achievable with acupuncture? (FR421A)

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Objectives

- Participants will learn about the benefits of using complementary acupuncture for the treatment of cancer induced bone pain
- Participants will understand about the use of complimentary therapies such as acupuncture to improve functionality and quality of life in advanced cancer patients

Background: Bone pain due to metastatic cancer is frequently unrelenting and many times exacerbated with minimal movement. Patients with cancer–induced bone pain often require high doses of opioids that cause undesirable side effects, contributing to poor functionality and reduced quality of life. Acupuncture has been used as a complementary therapy for symptom management in cancer patients. This Chinese technique has been utilized for centuries in Asian countries.

Case Description: AP is a 38-year-old patient with invasive ductal carcinoma diagnosed in 2011 status post modified radical mastectomy and adjuvant chemotherapy who did well until January 2016. At that time imaging studies showed multiple metastatic lesions throughout the spine, femur and pelvis and pathologic fractured of the left 6th rib and L2. She underwent L2 kyphoplasty and radiation to the right hip and cervical spine. She required high doses of opioid medications, steroids and zoledronic acid. The patient was seen in the Supportive Care clinic 3 weeks later reporting severe pain in her back. Her morphine equivalent daily dose (MEDD) was 480.

Acupuncture treatment with electric stimulation was started for bone pain and fatigue. A palliative care physician delivered treatment once a week for 8 weeks. Opioid requirements were reduced to a MEDD of 30 on week five and to a MEDD of 15 after 8 weeks with pain rated as 2/10 in right hip and none in neck and lower back.

Conclusion: Acupuncture should be considered as adjuvant treatment for cancer-related bone pain. Acupuncture with electric stimulation may significantly improve bone pain, allowing a reduction in total daily opioid needs, decreasing medication adverse effects and enhancing functionality. Additional studies are needed to confirm the benefit of acupuncture for cancer-related bone pain and the rapid de-escalation when a palliative care physician is simultaneously providing acupuncture and opioid management.

A Diagnostic Dilemma: Pseudobulbar Affect Masquerading as Dementia or Psychiatric Syndromes (FR421B)

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Objectives

- To increase awareness of Pseudobulbar Affect (PBA) in the differential diagnosis of behavioral changes in hospice and palliative care patients with advanced neurologic conditions
- To describe an interesting case of suspected PBA where the symptoms could result from multiple etiologies including dementia, depression, or behavioral changes due to Amyotrophic Lateral Sclerosis

Background: Pseudobulbar affect (PBA) is characterized by pathological laughing and/or crying and emotional lability that primarily affects patients with neurologic conditions such as Alzheimer's, Multiple Sclerosis, Amyotrophic Lateral Sclerosis (ALS), Parkinson's, stroke and traumatic brain injury. Although the true prevalence of PBA may be as high as 10% in these conditions, it remains widely underdiagnosed. Differential diagnosis of PBA includes ruling out depression or other psychiatric conditions. Treatment has traditionally centered on antidepressant therapies, but other options to consider include dextromethorphan/quinidine supplemented with counseling.

Case Description: A 63 year old female diagnosed with ALS two years ago was admitted to home hospice due to rapid decline in the preceding three months manifested by dysphagia, inability to speak, poor oral intake, functional decline with a PPS of 40% and greater than 40 lb weight loss. She also had a family history of early onset dementia. While on hospice, she was noted to be tearful, withdrawn and had repeated episodes of crying. One month later, she started having agitation, repeatedly banging her geri-chair and thrashing her arms. Medications included: Amlodipine, Senna and Citalopram 20mg daily. Her behavioral changes led to an increase of Citalopram and addition of Quetiapine but her symptoms persisted. Despite being nonverbal, she could answer simple yes/no questions appropriately and follow commands. The staff was surprised to learn that her depression screen was negative. A diagnosis of PBA was suspected as the cause of her behavioral changes rather than dementia, depression or ALS.

Conclusion: This complex case highlights the importance for palliative care and hospice clinicians to have a high index of suspicion for PBA in the differential diagnosis of behavioral changes in patients with advanced neurologic conditions. If PBA is suspected, a trial of dextromethorphan/quinidine, if not cost prohibitive should be considered along with psychosocial and spiritual support.

Have the Goal Posts Been Moved? Immunotherapy and Ambiguity in Goals of Care at the End of Life (FR421C)

Laura Taylor, MD, University of Michigan, Ann Arbor, MI

Daniel Hinshaw, MD, University of Michigan/VA Ann Arbor HCS, Ann Arbor, MI

Objectives

- Describe the current evidence base to support the use of immunotherapy with PD-1 and PD-L1 checkpoint inhibitors for advanced malignancies.
- Describe strategies to provide compassionate, consistent care while addressing potential conflict and/or confusion created by the introduction of these novel agents in the setting of advanced, terminal cancer.

Background: Immunotherapy with PD-1 and PD-L1 checkpoint inhibitors has been increasingly utilized to reduce cancer burden, prolong life, and improve symptoms in patients with selected advanced cancers. They are increasingly being offered to patients with a variety of advanced malignancies whose performance status would not support conventional chemotherapy, potentially creating confusion and conflicting goals of care at the end of life.

Case Description: A 72-year-old male veteran with castration-resistant prostate cancer metastatic to bone was admitted to the inpatient hospice unit for marked functional decline, refractory pain, inability to tolerate oral intake, and end-of-life care. With an ECOG performance status of 4, he was felt to have a prognosis of days to weeks. His outpatient oncologist, who had treated the patient for many years, had administered pembrolizumab, a PD-1 inhibitor, to the patient 1 week prior to admission. The patient, family, and inpatient hospice team agreed to transition to a comfort-focused approach given his functional decline and widespread metastatic disease resistant to multiple lines of therapy. The patient's oncologist disagreed with this approach, favoring aggressive monitoring of fluid and nutritional status with continued administration of pembrolizumab. This led to considerable conflict and distress among professional caregivers as well as confusion regarding the goals of care among family members of the patient. After many interdisciplinary discussions, the patient received two more cycles of pembrolizumab with no change in PSA or symptomatic improvement. He continued to receive end-of-life care in the hospice unit with an overall comfort-focused approach, and he died peacefully approximately 8 weeks after admission.

Conclusion: Immunotherapy with PD-1 and PD-L1 checkpoint inhibitors is a new frontier in cancer treatment. This presentation will review the current literature regarding the use of this immunotherapy in patients with advanced malignancies, and the challenges this poses for patients, families, and their caregivers at the end of life.

More than Just a Hiccup: The Management of Refractory Hiccups in a Patient with Advanced Cancer (FR422A)

Objectives

- Describe the potential mechanisms involved for the medications used in the treatment of hiccups
- Understand the existing evidence behind medications recommended to treat hiccups
- Develop an approach to the management of a case of severe, refractory hiccups

Background: Persistent, refractory hiccups can lead to significant distress. While chlorpromazine is FDA indicated for the treatment of hiccups, there is minimal literature to support a treatment algorithm for hiccups. It is critical to combine clinical experience with available literature in order to provide the best therapeutic approach.

Case Description: Mr. M is a 43 year-old with metastatic colorectal cancer. He recently received chemotherapy with FOLFOX but was unable to complete the treatment due to severe nausea/vomiting and hiccups. The possible etiologies for the hiccups included chemotherapy – induced, esophageal dilatation from persistent reflux, and peritoneal carcinomatosis. Prior to admission to the hospital, he has tried baclofen and chlorpromazine but has gotten minimal relief. He describes severe burning chest pain and nausea/vomiting associated with the hiccups. CT scan shows stable abdominal disease. He is TPN -dependent and has a venting G-Tube. Palliative Care is consulted and over the course of a week, we try metoclopramide, gabapentin, haloperidol, and anticholinergics. Steroids were also considered. The addition of nifedipine resulted in instantaneous resolution. Regular administration of immediate release nifedipine on medicine floors is not permitted, and the extended release was not as efficacious. Amlodipine was trialed as a long-acting calcium channel blocker (CCB) and provided sustained relief. The CCB did lead to cardiac complications, but he was ultimately diagnosed with leptomenigeal disease, so steroids provided relief long-term. Social work provided support and legacy work.

Conclusion: There is some evidence and many case reports of treatment options for persistent hiccups. Persistent hiccups can lead to associated symptoms, including pain, nausea/vomiting, and psychological distress. A review of existing evidence will be provided along with a treatment algorithm for the management of hiccups in patients with metastatic cancer. Special consideration must be given to potential adverse effects and tolerability in advanced cancer patients.

Compassionate Intubation: Refractory Dyspnea at the End of Life (FR422B)

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

Justin Baker, MD FAAHPM, St Jude Children's Hospital, Memphis, TN

Objectives

- Recognize the potential for refractory dyspnea at the end of life in patients with osteosarcoma with extensive pulmonary involvement.
- Appreciate the utility of invasive ventilation to mitigate suffering at the end of life in select circumstances.

Background: Compassionate extubation is a routine procedure in palliative care. It is based on the assumption that distressing symptoms, namely dyspnea, are amenable to treatment with opioids and adjunctive agents. Oncology patients with extensive pulmonary disease are at increased risk of experiencing refractory dyspnea at the end of life. Continuing some degree of ventilatory support while weaning FiO₂ may be an effective strategy for mitigating suffering in this subset of patients.

Case Description: AW was a 14 year old boy with a history of multiply recurrent, metastatic osteosarcoma who was known to be nearing the end of life. He presented to the ED unexpectedly with an acute episode of severe respiratory distress that had prompted his parents to call 911. He was intubated immediately on arrival. A CT Chest demonstrated disease progression with metastases occupying the entire right hemithorax, impingement of the right mainstem bronchus, and mediastinal shift. He was transferred to the PICU where the decision was ultimately made to withdraw support. A consensus was reached among the oncology, intensive care, and palliative care services that continued intubation and mechanical ventilation would be the most effective way to maintain comfort at the end of life given the extent of his pulmonary disease. Medications were escalated to include continuous infusions of fentanyl, midazolam, dexmedetomidine and hydromorphone with bolus doses as needed. FiO₂ was weaned to 60% but no other changes were made to his ventilator settings. He died within 30 minutes of weaning his supplemental oxygen with minimal signs of respiratory distress.

Conclusion: Oncology patients with extensive pulmonary disease or airway obstruction are at high risk for refractory dyspnea following compassionate extubation. In this situation, a strategy that involves weaning supplemental oxygen while maintaining ventilatory support may be the most effective means of mitigating suffering at the end of life.

A Case of 'Total Nausea': An Interprofessional Approach to Management of Chemotherapy-Induced Nausea/Vomiting Complicated by Anxiety and Existential Distress (FR422C)

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Objectives

- Define "total nausea"
- List three techniques for managing "total nausea"

Background: Nausea/vomiting is one of the most distressing symptoms following chemotherapy. Management of chemotherapy-induced nausea/vomiting (CINV) traditionally focuses on a biomedical approach and emphasizes medication management. Although anti-emetics are the cornerstone of treatment, not all patients can be effectively treated with anti-emetics alone, especially when the symptom is complicated by underlying anxiety and spiritual/existential distress. Here we introduce the concept of total nausea – a complex intersection of severe CINV, underlying anxiety, and spiritual/existential distress, which require an interprofessional, multi-modal approach to management.

Case Description: Ms. S is a 45-year-old married mother of three with a history of resected spinal chondrosarcoma. In the setting of metastatic disease to her lungs, Ms. S was started on a multi-drug, moderate to highly emetogenic chemotherapy regimen. Despite receiving guideline-based prophylaxis, she developed severe, delayed CINV (the worst her providers had seen), necessitating prolonged admission for symptom management. Based on an initial palliative care needs assessment, Ms. S was managed with escalating doses of anti-emetics and psychosocial and spiritual support with minimal impact on her symptom burden. Given this, a more nuanced assessment was undertaken which revealed long-standing anxiety and existential distress about redefining her purpose in life and self-worth in the context of ongoing illness. Once we recognized the complexity of her condition, we implemented a more comprehensive approach to therapy including: acupuncture 3x/week, twice daily visits with the palliative social worker focused on cognitive-behavioural and mindfulness techniques, existential support from multiple chaplains, and Reiki sessions. Following full implementation, Ms. S's nausea improved significantly and she was able to spend increasing periods of time at home between chemotherapy cycles.

Conclusion: Similar to the concept of total pain, total nausea exists when nausea/vomiting and underlying psychosocial and spiritual/existential concerns interact to cause complex suffering and requires a multi-modal and interprofessional approach to management.

KEEPING ALIVE THE KETAMINE DIALOGUE: Subanesthetic Subcutaneous Ketamine Infusion as an Opioid Adjuvant (FR442A)

Charles Newton, MD, HOPE HealthCare Services, Fort Myers, FL

Objectives

- The attendee will be capable of choosing the best opioid and adjuvant strategies for controlling the most severe pain in patients who are commonly facing their immediate end of life.
- The attendee will be able to confidently order Ketamine therapy, either as treatment for Opioid Induced Hyperalgesia (OIH), or as an opioid adjuvant for patients with rapidly escalating pain to hopefully prevent OIH.
- Attendees working in a hospice environment will be able to better choose opioid and adjuvant therapies based on a "cost to the organization" analysis.

Background: Although a body of clinical literature exists detailing Ketamine as treatment for Opioid Induced Hyperalgesia (OIH), few clinical studies examine subanesthetic Ketamine as an opioid adjuvant to enhance treatment of escalating pain in cancer patients. This case study highlights one experience.

Case Description: LN was a 64-year-old female, hospice enrolled, with a diagnosis of advanced Non-Hodgkin's Lymphoma. On 06/14/2016 the patient was transferred from home to an inpatient hospice house to treat rapidly escalating back pain not responsive to daily increases in her oral opioids. On admission a Fentanyl intravenous (IV) patient controlled analgesia (PCA) infusion was started, her oral opioids stopped, and oral Dexamethasone maximized. Throughout that first night her pain scale never dropped below 10/10, despite increasing both her basal and demand PCA dosing.

On the morning of 06/15/2016, with LN screaming in pain, her Fentanyl IV PCA dosing was increased again. By early afternoon, with her pain scale only minimally reduced, the Fentanyl basal dose was increased by 50%, her demand dose was doubled, and a Ketamine subcutaneous (SC) infusion was begun, starting at 1mg/hr (0.016mg/kg/hr). The morning of 06/16/2016 found the patient comfortable for the first time, with a pain scale down to 6/10. From 06/17/2016 through 06/20/2016, LN's pain scale occasionally rose, necessitating small increases in her Fentanyl IV PCA dosing, and/or her Ketamine SC infusion. Her pain scale never returned to the level she exhibited prior to Ketamine initiation. From 06/20/2016 to her death on 06/26/2016 she was comfortable, with a registered pain scale 5-6/10 on stable Fentanyl PCA and Ketamine infusion doses.

No psychotomimetic side effects were observed with the low Ketamine doses utilized.

Conclusion: Ketamine, as an NMDA receptor antagonist, can be a useful adjunct to traditional opioid analgesics in treating rapidly escalating pain in a hospice population.

Between a Rock and a Hard Place: Anticipating Poor Surgical Outcomes at the End of Life while Honoring Patient Autonomy (FR442B)

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Objectives

- Recognize the emotional toll of unwanted outcomes for surgeons.
- Identify critical elements of decision-making between surgeon and patient.

Background: Although substantial efforts have been made to reduce perioperative complications and mortality, even in the context of advanced illness, far fewer efforts have been made at recognizing and addressing the emotional impact of poor outcomes that are often anticipated by the surgeon. After a poor surgical outcome, surgeons have been reported to initially experience feelings of failure, followed by a sense of chaos and a varying ability to reflect, and finally, the long-term impact. Although it is unclear to what extent the long-term impact negatively affects each individual surgeon, it is critically important to introduce strategies to mitigate the effects of provider burn-out, depression, and suicidality. The opportunity to discuss and reflect with the Palliative Care team may allow the surgeon to heal as well as to foster increased empathy and improved patient-centered care.

Case Description: A 62-year-old veteran with Stage IIIB multiple myeloma and severe COPD was admitted for recurrent *Clostridium difficile* infection. Despite maximal medical therapy, the patient developed worsening distention and evidence of compromised bowel. Given the high risk of prolonged mechanical ventilation and need for stoma, the patient elected to continue medical management and Palliative Care was consulted. The following day, the patient had had the opportunity to speak with his family and chose to proceed with surgery. The patient was extubated postoperatively but remained in the ICU requiring renal replacement therapy. On POD #6, the patient, alert and in no distress, requested transition to comfort measures. The patient was transferred to inpatient hospice and died with his family at the bedside on POD #16.

Conclusion: This case highlights the unique challenges a surgeon faces when offering an intervention with a high likelihood of failure, and the indispensable role of a skilled palliative care specialist in decision-making and above all, providing comfort to both the patient and the surgeon.

Methadone as a Co-analgesic, or Slow Conversion? (FR442C)

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Objectives

- Identify the different methods available to convert patients to methadone

- Describe the use of methadone as a co-analgesic in palliative care
- Discuss co-analgesia and safe methadone conversions and titrations

Background: There are many methods for methadone initiation and titration, including rapid conversion (RC) and ad libitum conversion (AL)⁽¹⁾. Low doses are being used more in palliative care settings as a co-analgesic with other long acting opioids⁽²⁾. Presented is a case where the addition of methadone as a co-analgesic and continued titration of opioids while monitoring for safety more closely represents a “slow” conversion method.

Case Description: Ms. E is a 57-year-old woman with stage IV NSCLC with metastases to the brain and spine, admitted with lower back and right leg pain. Her pain was described as throbbing and aching with a sharp component that radiated down her leg to the knee. On admission she was on a fentanyl 100mcg/hr transdermal patch every three days, and was started on intravenous hydromorphone 1-2mg every 2 hours as needed. At the end of 3 days her fentanyl patch had been titrated up to 250mcg/hr, and oral hydromorphone 12-16mg every 3 hours as needed. Previously the patient had declined rotating to methadone because of prior side effects, but during this admission she agreed to start methadone at 2.5 mg every 8 hours as a co-analgesic. Within 3 days, her pain was markedly improved, and fentanyl was decreased. At discharge on she was on fentanyl 75mcg/hr, methadone 5mg every 8 hours, and hydromorphone 8-16mg by mouth every 3 hours as needed. At her outpatient clinic appointment 9 days later, she had discontinued fentanyl on her own without reported adverse events, and with good pain control.

Conclusion: There are many methods when using methadone in the control of cancer pain. In this patient co-analgesic initiation and titration resembles a complete conversion. As the use of methadone as a co-analgesic increases, other long acting opioid use can still be reduced dramatically and perhaps removed if analgesia response is complete.

Trauma Informed Care in Palliative Care: How prior trauma should inform the care we provide (FR462A)

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Objectives

- Recognize prior trauma in patients and their families and characterize how trauma may shape response to illness and decision-making
- Understand trauma-informed care and develop an approach to trauma-informed care in palliative care
- Describe how trauma-informed care may optimize health-care outcome

Background: Exposure to trauma is common. Approximately 50% of the population will be exposed to traumatic experiences in their lifetime, with 10-20% developing post-traumatic stress disorder. Though initial studies focused on combat and sexual abuse, a plethora of traumatic events can impact health. Chronic illness may similarly be traumatic, resulting in reduced quality of life and psychopathology. Prior traumas may negatively influence a patient's ability to interact with the medical team, thus prohibiting optimal care. Trauma-informed care (TIC) may help guide medical care by recognizing prior traumatic experiences. Palliative care is ideally situated to understand prior trauma and psychological responses and thus develop models of TIC with which primary teams can tailor care.

Case Description: PF was born with a hypoplastic left heart and underwent a three-staged palliative repair. He recovered well following a prolonged hospitalization. At the age of 15, however, he presented in heart failure, requiring transplant. In the ICU, PF and his family struggled to interact effectively with the medical team, which resulted in a delayed listing for transplant. The palliative care team helped discern the family's prior experience with trauma – the chronic illness of the patient, his mother's prior experience with the patient in the ICU and her own medical trauma, and his father's combat history – and was thus able to improve the interactions between the family and the medical team. TIC greatly improved care for PF through improved trust and communication by responding to the prior trauma; he subsequently was listed and received a transplant.

Conclusion: By recognizing prior trauma, palliative medicine can facilitate development of a model of TIC to optimize care. We will discuss the recognition of traumas, explore its impact on patients, and decipher how an approach of TIC may markedly improve health care outcomes and promote high value care.

Integration of Palliative Care in End-Stage Liver Disease awaiting liver transplantation (FR462B)

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Objectives

- Recognize the underutilization of palliative care in end stage liver disease
- Recognize opportunity to bridge care for end stage liver disease patients awaiting liver transplantation

Background: End-stage liver disease (ESLD) is a life-limiting illness frequently associated with substantial symptom burden and psychological stress. As disease progresses with complication (ie. hepatorenal syndrome), the only definitive cure is liver transplantation, an impactful option that only a minority of patients will receive. Of the 5.5 million people affected by ESLD in the U.S., 16,000 patients meet eligibility for waitlist, 40% receive transplants annually. The remaining receive treatments that are primarily palliative in nature, yet studies show that palliative care is tremendously underutilized. Here lies a significant opportunity to provide concurrent palliative care and support as they await the possibility of liver transplantation.

Case Description: Mr.B is a 37year-old gentleman with alcoholic liver cirrhosis, esophageal varices, new hepatorenal syndrome (HRS) who was transferred from outside hospital for liver transplantation evaluation (MELD 36).He was deemed ineligible due to recent alcohol use, less than 1-month period of sobriety and high risk of relapse. During his 6-week hospital course, HRS persisted despite albumin, midodrine and octreotide and was further complicated by coagulopathy and opportunistic infections. He responded to Terlipressin trial therapy, but declined once off this study drug. Palliative care service was consulted given the limited treatment options and life expectancy. Despite poor prognosis, his goal was to become eligible for transplantation. An interdisciplinary team approach with palliative care provided supportive counselling, art and music therapy as means for self-expression, and assisted him with advanced care planning. He stabilized enough to discharge home with hospice. He initiated outpatient alcohol rehabilitation, but soon decompensated and became too ill to continue. In light of his advancing disease trajectory and worsened MELD score 42, he was emergently placed on the transplant waitlist and received orthotopic liver transplantation 8 days later.

Conclusion: Palliative care provides ESLD patients with symptom management, alternative therapies, psychosocial and emotional support. This adds an integral layer of support as patients await the possibility of liver transplantation.

As a Last Resort: the Use of Percutaneous Transhepatic Biliary Drainage for Refractory Malignant Bowel Obstruction (FR462C)

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Objectives

- Given the cases of percutaneous transhepatic biliary drainage procedures performed for malignant bowel obstruction in end-of-life patients, the attendees would be able to propose an alternative approach to symptomatic improvement in patients who are otherwise not candidates for traditional palliative approaches to malignant bowel obstruction.
- Given the cases of percutaneous transhepatic biliary drainage procedures performed for malignant bowel obstruction in end-of-life patients, the attendees would be able to discuss with their patient about the choices a patient with malignant bowel obstruction may have regarding disposition from the hospital.

Background: Malignant bowel obstruction (MBO) is a common complication in patients with gastrointestinal and metastatic malignancies. Beyond the immediate intervention of nasogastric tube (NGT) for decompression, the current literature supports endoscopic metal stents and venting percutaneous endoscopic gastrostomy (PEG) for symptomatic relief without requiring long-term hospitalization. However, in clinical practice, our interdisciplinary team of palliative and oncology specialists and interventional radiologists have encountered difficult cases for which these standard approaches cannot be offered, for example patients for whom venting PEGs are unable to be placed. Although percutaneous transhepatic biliary drain (PTBD) placement is not traditionally performed for bowel obstruction, our medical team used PTBD for bowel decompression as last resort therapy for these difficult cases. The approach of PTBD in MBO has not been previously reported. We present this alternative palliative treatment approach in a case-series study to contribute to the literature as an intervention to consider in difficult MBO cases.

Case Description: A total of six cases were reviewed. Patients were 30 to 62 years old, had metastatic malignancy, were at end-stage of disease, and were diagnosed with prolonged refractory MBO. Patients were deemed poor candidates for venting PEG or stent due to: failed decompression attempt with endoscopic stent, malignant ascites, extensive distension of bowel, difficult anatomy from prior intra-abdominal surgeries and high peritoneal tumor burden. All patients were hospital- or facility-dependent with NGT suctioning needs. We considered a successful outcome as being discharged home with symptomatic relief. Four patients were discharged home with “venting” PTBD. Two patients were unable to be discharged home: one PTBD was unsuccessful due to the inability to access biliary system, and another patient required persistent NGT.

Conclusion: In palliative patients with MBO who are poor candidates for traditional approaches of bowel decompression, PTBD may provide successful symptom relief and allow hospital dependent patients the possibility of discharge.

The “Devil” is in the Details: Dialysis and Religion at the End of Life (SA509A)

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Objectives

- Identify the current state of dialysis utilization at the end of life.
- Recognize the concerns with stopping treatment from a religious perspective.
- Identify strategies to improve conversations about termination of dialysis

Background: End-stage renal disease (ESRD) is a unique medical management challenge with no cure and no “one-size” approach. When dialysis is initiated, a full discussion of the patient’s treatment goals, motivation, and understanding may not always occur, which leads to complications when the patient’s condition is impacted by worsening illness.

Case Description: Mr. C. was a 77 year old veteran diagnosed with an aggressive squamous cell carcinoma of the scalp who was brought to the nursing home to live while receiving palliative radiation treatments. Mr. C. also had significant comorbidities including end stage renal disease requiring hemodialysis, diabetes mellitus, coronary artery disease and blindness in his left eye. Unfortunately, during his admission, Mr. C. experienced numerous complications including vision loss from radiation therapy. Although he refused many interventions and discontinued radiation, Mr. C. was resolute in his desire to continue dialysis, despite mounting discomfort and his own observation that he was getting “closer to dying.” Repeated conversations did not change his mind until he offhandedly mentioned that he was continuing dialysis because he was not going to “commit suicide.” Once this concern was identified, the chaplain and the patient’s priest were able to reassure him that his Catholic faith would not consider discontinuing dialysis in his situation to be suicide. He then decided to stop dialysis and passed away peacefully the next day.

Conclusion: Even after numerous conversations, a patient’s motivation may remain unclear if the right questions are not being asked. This presentation will review the current state of dialysis at the end of life and its implications for palliative care and hospice patients, the viewpoints of major religions with regard to end-of-life treatment, and strategies for discussion to help identify a patient’s motivation for pursuing continued interventions.

When Religion Clashes with Personal Values: Reconciling Religious and Medical Perspectives at End of Life (SA509B)

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Objectives

- Compare and Contrast Religious vs Medical Perspectives on the Provision of Care for the Dying.
- To discuss collaborative, team based approaches to religious perspectives on withdrawal of life sustaining treatment

Background: Many strongly religious patients and families struggle with decisions to withdraw artificial life sustaining treatments (LST) from patients who are no longer able to breath on their own or feed themselves, when such withdrawal may lead to death. They look for religious guidance which may favor maintaining and preserving life at all costs, but recognize that there are circumstances in which it may be morally justifiable to refuse, withhold, or withdraw LST.

Case Description: An 88 year-old Orthodox Jewish F suffered a sudden cardiac arrest at home. She responded to 20 minutes of ACLS in the field, during which she was intubated. She was admitted to the CCU, was found to have severe anoxic brain injury. Family meeting held with son, who stated that patient would not have wanted to be in pain, in vegetative state, and that she wished to abide by Jewish laws and ethics. However, Jewish ethics usually forbids withdrawal of LST if imminent death would be caused by that withdrawal. After team discussion, the family Rabbi clarified that it would be acceptable to extubate her if there was a “reasonable” expectation that she would breathe on her own for a “reasonable” amount of time. Active discussion amongst Cardiology, Palliative team, family Rabbi, and hospital Rabbi, defined the “reasonable” expectation to mean that she could breathe on her own on the order of hours. Pulmonologist concluded that she would likely be able to breathe for hours after extubation. After 12 hours post-extubation, patient died comfortably surrounded by her family.

Conclusion: A multi-specialty and interdisciplinary approach, including pastoral care services, and use of good facilitated communication, can help meet patient goals while respecting the interpretation and application of Jewish Law.

A Reluctant Flight Home: Challenges and Strategies for Terminally Ill International Patients Who Travel Back to Their Country of Origin (SA509C)

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Objectives

- Outline communication strategies for international patients with terminal illness who are seeking a miracle.

- Recognize safety considerations and challenges of coordinating international travel for patients at the end-of-life.
- Identify strategies for developing a safe and well-coordinated plan of care for patients at the end-of-life who desire to return to their home country.

Background: It is not uncommon for tertiary referral hospitals in the U.S. to attract international patients, many of whom are terminally ill and are hoping for a miracle cure. The window of opportunity for patients who decide to return to their home country to die is often narrow and fraught with logistical complexity.

Case Description: A 59 year-old Nigerian man with metastatic pancreatic cancer traveled to Boston for further chemotherapy options. He was a devout Catholic who believed in miracles and that God could cure his cancer through his physicians. Shortly after his arrival, he was admitted to the ICU for sepsis secondary to obstructive cholangitis. He improved following biliary drain placement, treatment of his sepsis, and was transferred to the floor. After multiple family meetings, no further chemotherapy was offered, so the patient decided to return home. Palliative care worked closely with hospital medicine to assess his travel needs, secured medications and supplies he would need for comfort, and arranged for him to receive expert end-of-life care in Nigeria.

Conclusion: Key challenges when caring for terminally ill patients traveling to the U.S. for curative treatment include managing expectations through culturally sensitive communication, assessing patient ability to tolerate travel, accurately anticipating medical and transportation needs, and identifying clinicians to provide end-of-life care and medications in the patient's home country. This case discussion offers strategies for communication challenges in international patients expecting a miracle, reviews the limited literature on the travel needs of terminally ill international patients, reviews the barriers to identifying clinicians capable of providing end-of-life care in patients' home countries, reviews opioid availability in countries that most commonly send patients to the U.S., and offers a systematic way for clinicians to develop a safe and well-coordinated plan of care for international patients returning home at the end-of-life.

Throw Down The Gloves: An Evidence-based Best Practice Process Decision Guide to Minimize Use of Inappropriate Contact Precautions in Inpatient Hospice Units (SA519A)

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Objectives

- Learners will be able to describe the negative effects contact precautions can have on patients in an inpatient hospice setting at end of life.
- Learners will become aware of patient-centered protocols supported by CDC guidelines and evidence-based practice that are effective in reducing MDRO transmission while reducing the need for physical barriers.
- Using the evidence-based process chart we provide, learners will be able to describe when to continue, discontinue, or apply CP in limited use.

Background: Patients continue to be placed on contact precautions (CP) despite studies showing that implementation of CP often does not affect multidrug-resistant organism (MDRO) transmission (Harris et al, 2013) (Derde et al, 2014) (Almyroudis, 2016). Negative consequences of CP are well documented, including increased depression and anxiety (Morgan, Diekema, Sepkowitz & Perencevich, 2009), negative impact on psychological well-being, patient satisfaction and even patient safety (Abad, Fearday & Safdar, 2010).

Case Description: A 36-year-old African American female with advanced cervical cancer was admitted to our inpatient hospice unit (IPU) for management of complex physical and emotional pain. CP were continued related to C. difficile infection, partially treated during prior hospitalization. Her symptoms resolved, meeting Center for Disease Control's (CDC) guidelines for suspending CP (Siegel, Rhinehart, Jackson & Chiarello, 2007). CP were discontinued, marking a turning point in her emotional well-being. Her appetite increased, she engaged in her care and she established meaningful friendships. This helped her reclaim her identity, refine her goals and leave our IPU for further rehabilitation.

Conclusion: In an IPU, adverse effects of CP acquire new gravity, creating physical and psychological barriers. Communication is diminished, heightening disconnection to those around them. The former, well-self and the current ill-self are disunited, making it harder to erect bridges spanning this divide. Every effort should be made to minimize CP for patients in an IPU. We present an evidence-based best practices process chart, incorporating CDC guidelines, to assist providers in determining appropriate use of CP at the end of life. It is time to throw down our gloves, get rid of ineffectual barriers and reconnect with our patients.

Food for Thought: Is There a Role for Hospice in Refractory Anorexia nervosa? (SA519B)

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Objectives

- Describe the complex nature of refractory anorexia nervosa and the challenges providers face in determining when and if anorexia nervosa is a terminal illness.
- Recognize in some cases, patients with psychiatric illness are competent to refuse medical treatment
- Explore whether severe refractory cases of anorexia nervosa can be appropriate for hospice approach

Background: Anorexia nervosa is a psychiatric illness presenting with, severe malnutrition and extensive physical complications. While hospice care is well established for patients with a terminal illness, a transition from curative to comfort oriented care in patients with a psychiatric illness is still fraught with challenges and controversy.

Case Description: A 35 year old female with a 20 year history of anorexia, presented to the Emergency Department requesting admission to the palliative care unit for hospice care. Her family supported her request for end of life care. She had previously participated in three inpatient treatment programs, and numerous outpatient programs. Upon presentation she was cachectic, hypotensive, with a decubitus ulcer, but refused medical interventions. The chronicity of her illness had resulted in significant physical decline, and consensus was that even with successful treatment of her psychiatric illness, it was uncertain that her physical condition was reversible. After palliative care, ethics, psychiatric and hospital legal team consultations, it was decided that admission to the palliative care unit for hospice care could not be offered.

Psychiatry deemed that the patient had capacity to refuse medical treatment. The patient and family opted to go home with follow up from a hospice agency. She eventually was enrolled in hospice, and died at an inpatient hospice unit approximately one month later.

Conclusion: In severe cases of chronic refractory anorexia nervosa, with likely irreversible physical decline, there may be a role for hospice care as part of an interdisciplinary team.

A Telemedicine Approach to Interdisciplinary Palliative Care: a Model for Improved Quality of Care and Cost-savings among Non-hospice Terminally Ill Patients (SA519C)

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Objectives

- Recognize the value of an interdisciplinary palliative care team, who provides comprehensive care at the end of life.
- Understand the benefits of an IPC model that provides continued care.

- Describe the risk factors for 30 day readmission in patients with terminal diagnosis.
- Describe quantifiable measures of intervention efficacy in palliative care programs.

Background: Interdisciplinary palliative care (IPC) teams play a critical role in end-of-life patient care, and is shown to save healthcare dollars by decreasing 30-day readmission rates while providing quality care to patients with high burden of symptoms. Many patients have limited access to IPC due to a number of physical and financial barriers. Eisenhower Medical Center (EMC) developed an IPC telehealth model enabling an interdisciplinary team of physicians, intermediate providers, nursing staff, social workers, pharmacists and chaplains to jointly assess patient needs and facilitate continuation of care following hospitalization

Case Description: A 75-year old male with metastatic colon cancer complicated by pulmonary lymphangitic spread presents for the second time within 30 days to the ED for shortness of breath. The patient wished to continue on fourth line chemotherapy, an IPC consult was made. The patient and his wife were educated on symptomatic management and provided with supportive resources at discharge, including contact information for the IPC team and a follow up appointment was arranged. In the following weeks, the patient utilized these resources, avoiding readmission during his last month of life while continuing chemotherapy. He passed comfortably at home with his wife at bedside receiving support from an IPC physician on the telephone.

Conclusion: Comparison of national readmission rates for Medicare patients to EMC's IPC patients demonstrates a 14% reduction. The strongest predictor for readmission was patient disposition at discharge ($p < 3.8 \times 10^{-8}$), with the highest rates observed among those discharged to home (22.6%) and skilled-nursing-facilities (18.6%), as compared to patients discharged to hospice (1.2%). Leveraging retrospective institutional data review, collective team experience through case studies and continued evaluation of the active intervention model enabled our EMC team to establish an economically sustainable IPC telehealth program that provides patient support across the continuum of care with cost-savings to the organization and healthcare system at large.