Successful Palliation of Octreotide Resistant Diarrhea Using Glycopyrrolate in a Patient with Medullary Thyroid Cancer (FR459-B)

Alia Alawneh, MD, King Hussein Cancer Center, Amman, Jordan
Ayoub Innabi, MD, King Hussein Cancer Center, Amman, Jordan
Wa’El Tuqan, MD, King Hussein Cancer Center, Amman, Jordan
Areej Abu Sheikha, ACNS, King Hussein Cancer Center, Amman, Jordan
Ihab Shehadeh, MD, King Hussein Cancer Center, Amman, Jordan

Objectives
- Describe chronic diarrhea and its impact on quality of life in patients with neuroendocrine tumours.
- Identify anticholinergic medications as a potential treatment for octreotide-resistant diarrhea associated with medullary thyroid cancer.
- Recognize glycopyrrolate as a relatively inexpensive treatment of diarrhea associated with medullary thyroid cancer.

Background: Chronic diarrhea is a common symptom in patients with neuroendocrine tumours. Guidelines recommend loperamide and codeine in grades I-II by Common Terminology Criteria for Adverse Events (CTCAE). Octreotide, short acting and long acting, is recommended for grades III-IV. Octreotide resistant diarrhea can be present or later develop in 30% of patients.

Case Description: We present a case of a 61 year-old gentleman who has metastatic medullary thyroid cancer and who continued to suffer from chronic diarrhea alternating between CTCAE grades II and III for more than 12 months. Nocturnal diarrhea was present and patient could not maintain body weight. Surgical tumour resection, treatment with loperamide and octreotide did not help. Codeine helped reduce the frequency of diarrhea by two bowel motions a day. This was not regarded as a clinically significant change. Glycopyrrolate is a common medication used in palliative care to help reduce excessive secretions and abdominal cramps; it crosses the blood-brain barrier less than other anticholinergics and so lower rate of precipitating delirium. Constipation is a common side effect. It was thought to help control our patient’s diarrhea. This, as well as side effects, notably mouth dryness, was discussed with the patient and he opted to try it. Patient’s diarrhea was remarkably reduced to 1-2 bowel motions per day, no nocturnal diarrhea. Body weight increased by three pounds within the first two weeks. Artificial saliva and lemon lozenges were used to help with experienced mouth dryness.

Conclusion: Our case suggests anticholinergics can be used in non infectious cancer related diarrhea. Prospective clinical trials are needed to evaluate effectiveness and possible adverse events.