Title - Minimally Invasive Surgical Treatment of Sigmoid Volvulus in 4 High Risk Patients

Program of Study - Doctor of Osteopathic Medicine

Presentation type – PowerPoint and Print Poster

Mentor and mentor email - Dr. Kareem A. Hamdy (hamdymd@gmail.com)

Student name and email - Ernesto Luis Enrique (ELEnrique@liberty.edu)

Category - Applied

Background: Sigmoid volvulus (SV) is a common cause of large bowel obstruction worldwide. Presenting symptoms can be nonspecific and varied amongst the elderly population, making medical and surgical management challenging. This population is at markedly increase risk of complications and mortality with surgery under general anesthesia. In this case series, we describe 4 case of sigmoid volvulus in the elderly patient.

Goals: To demonstrate that sigmoid colectomy under local anesthesia, with or without intravenous conscious sedation, is feasible and can be done safely and with a low rate of converting to a general anesthetic.

Results: Four patients, mean age 90 years, were admitted a total of 4 times for acute sigmoid volvulus. All 4 patients had a past medical history significant for a number of chronic diseases. There was no relevant past surgical history and patients either underwent decompression followed by surgery or immediate surgery without decompression.

Conclusion: These 4 cases provided a safe approach with acceptable perioperative and postoperative results. Additional studies are needed to determine if this technique
results in improved 30-day and long-term mortality and morbidity in the high risk patients and to determine if the technique should be extended to all patients with sigmoid volvulus, including those who are at low or moderate risk for general anesthesia.

**Christian worldview integration:**

In osteopathic medicine, we believe in mind, body, and spirit. With our education at Liberty University College of Osteopathic Medicine, we receive training with a Christian worldview. We were motivated, educated, and equipped by Christian doctors and teachers. As a class, we hold each other up. As individuals, we carry the Christian worldview that Liberty University College of Osteopathic Medicine has taught us. As osteopathic medical students, the idea of mind, body, and spirit embodies the holistic approach to practicing medicine consistent with the Christian worldview and our educational convictions. With this we focus on community based practices in underserved areas where we can focus on the spiritual needs of patients. Professionals in health care deal with daily problems of religious, moral, and ethical dimensions. At Liberty University College of Osteopathic Medicine, we received the training to practice the process of ethical decision making from a Christian perspective. They have provided a strong foundation into which we have insight into the human condition from a Christian view.

This case, and any other acute surgical case can be an example of this view. The surgeon uses their hands to help patients get better. In return, the patient, is embodied with the strength to continue their involvement in pursuing their values. Often faith and praying gets patients and families through the preoperative and postoperative periods.
We encourage this. With sigmoid volvulus being such a high-risk disease, praying will only encourage faster healing.