Laparoscopic Treatment of Perforated Stump Appendicitis
Case Report and Review of the Literature
Arthur Berg, DO, Elizabeth Verrico, DO, Jenna Gillen, DO, Steven Shiklar, MD, John Davis MD
Department of Surgery, HackensackUMC Palisades, North Bergen, New Jersey

INTRODUCTION

• Stump appendicitis is a rare post-operative complication post appendectomy, reported incidence of 1 in 50,000 cases
• Mean interval follow up is 8 years after initial operation, mean age is 39
• Increase in incidence since the widespread use of laparoscopy likely secondary to the lack of tactile feedback in feeling the base of the appendix and the visual limitations in the face of severe inflammation or perforation on initial presentation
• Stump appendix length >5mm has been shown to increase the incidence likely because that is the required length to provide a reservoir for faecoliths
• Long residual stumps could also harbor small bowel cancer or carcinoid that would have been missed on pathology otherwise

CASE REPORT

22-year-old female with past medical history of Laparoscopic Appendectomy in the year prior presented to our community hospital with sharp right lower quadrant pain. Of note, she had two readmissions for stump appendicitis in a span of 6 months since her appendectomy. Her symptoms on this admission closely resembled her previous episodes, which she recognized. CT scan showed a dilated stump appendix with associated fat stranding consistent with stump appendicitis. Intra-operatively, the patient was found to have purulent peritonitis. After mobilization of the cecum, a partial cecectomy was performed which included the segment of the stump appendix. Her post operative course was uncomplicated and pathoogy was consistent with stump appendicitis.

CT SCAN

DISCUSSION

• The earliest reported case was in 1945 and the incidence has risen over the last several decades with advent of laparoscopy (1).
• The presence of a stump appendix greater than 5mm has been shown to increase the incidence of stump appendicitis because this is the typical length needed to provide a reservoir for faecoliths (4)
• Completion appendectomy is generally recommended (1,3,5) to decrease the risk of abscess, hemorrhage from the mesoappendix, or even small bowel obstruction as a result from the residual stump (3,4). The possibility of a duplicated appendix must be ruled out as well (1).
• A large majority of cases in the literature have completion appendectomies performed in the open fashion (1). Our case is unique in that it was performed laparoscopically and in the setting of perforated stump appendicitis
• Laparoscopy allowed us to have a global inspection of the abdomen while avoiding the need for a laparotomy incision or ileocolic resection, however there are no long-term studies on the outcomes between laparoscopic and open approaches.

REFERENCES