
ABSTRACT

Purpose: Mucocele of the appendix, as a rare disease, is defined as cystic dilatation filled with mucinous material. Underlying pathology differs in a wide range and preoperative diagnosis is very difficult in most of the time. Surgical resection either by appendectomy or right hemicolectomy is accepted as treatment modality. In comparison to open approach, safety and feasibility of laparoscopic approach has not been shown in detail.

Material and Method: This report describes a case of mucocele of the appendix treated by laparoscopic appendectomy.

Case Report: A 33-year-old male patient was admitted with a complaint of dull right lower quadrant pain that
had persisted for 10 days. Imaging evaluation revealed a tubular-cystic structure arising from the cecum. With a diagnosis of mucocele of the appendix, laparoscopic exploration followed by appendectomy was performed. He was discharged at the second postoperative day without any complaint. Pathology showed an appendiceal mucinous cystadenoma.

**Conclusion:** Appendiceal cystic tumors can be removed safely in appropriate cases via laparoscopic approach avoiding intraperitoneal rupture and dissemination.

**Key words:** Mucocele, Appendix, Laparoscopy, Appendectomy
Laparoscopic surgery for appendiceal cystic tumors is also another concern, as inadvertent rupture of the lesion due to improper handling will cause pseudomyxoma peritonei. In one case report, it was mentioned that laparoscopy was contraindicated in the presence mucinous appendiceal tumors. But, this study has some specific features that the patient was operated with preoperative diagnosis of acute appendicitis, and four days later right hemicolecction was performed due to the pathology report of the mucinous cystadenocarcinoma arising in a villous adenoma. Eleven months later, diffuse peritoneal mucous recurrences were developed. There was no perforation of the tumor during the previous operation which was performed due to an abdominal emergency, but formation of a phlegmon between a retrocecal appendix and the right colon in an emergent operation might be clues for an advanced tumor. So, we cannot conclude that laparoscopy is a contraindication in the presence of appendiceal cystic tumors only based on this study.

It should be kept in mind that appropriate precautionary measures such as minimal laparoscopic dissection, non-traumatic grasping of the appendix, or transport of the specimen through the abdominal wall using a protective barrier to avoid rupture in the peritoneal cavity and dissemination of mucin containing cells are very important for preventing possible recurrences. In conclusion, appendiceal cystic tumors can be removed via laparoscopic approach avoiding intraperitoneal rupture and dissemination, unless presence of the tumors spreading out of the appendix and intraoperative finding of pseudomyxoma peritonei.
References


