

Appendicular Mucocele: Possibilities and Limits of Laparoscopy. Brief Series and Review of the Literature

E. Târcoveanu¹, A. Vasilescu¹, R. Van Hee², R. Moldovanu³, C. Ursulescu⁴, D. Ciobanu⁵, C. Bradea¹

¹First Surgical Clinic, "St. Spiridon" University Hospital, "Gr. T. Popa" University of Medicine and Pharmacy Iasi, Romania

²Universiteit of Antwerpen, Belgium

³Department of Surgery & Oncology, "St. Mary" Clinic, Cambrai, France

⁴Department of Radiology, "St. Spiridon" University Hospital, "Gr. T. Popa" University of Medicine and Pharmacy Iasi, Romania

⁵Department of Pathology, "St. Spiridon" University Hospital, "Gr. T. Popa" University of Medicine and Pharmacy Iasi, Romania

Abstract

Introduction: Appendicular mucocele, a cystic dilatation of the appendix, is a rare disease, but unfortunately about 1/10 of cases evolves into pseudomyxoma peritonei.

Methods: We performed a prospective study between 1 January 2010 to 31 December 2014 in order to track the incidence, symptoms, and circumstances of diagnosis, treatment and evolution of these rare tumors.

Results: A total of seven patients underwent curative surgery for a mucocele of the appendix: one woman and six men with an average age of 59.71 years. Clinical signs, present in two cases, were uncharacteristic. Ultrasound performed in all cases, could guide diagnosis in 5 cases. CT performed in 5 cases diagnosed only two cases. All cases were operated on: the open approach was used in four cases and a minimally invasive in three cases. We performed two right colectomies, an open appendectomy associated to anterior resection of the rectum, two laparoscopic appendectomies and two appendectomies and cecum resection with stapler, one by open approach and one by a minimally invasive approach. Intraoperative spillage of mucinous tumor did not occur in any case. The mean hospital stay was 5.7 days. Postoperative complications were present in 1 case (14.2%): wound infection. The average follow-up period was 40.28 months. (Range 6 to 48 months). No tumor recurrence or readmission, such as pseudomyxoma peritonei, has occurred.

Conclusions: Appendicular mucocele is a rare entity; it can be found incidentally and it can mimic acute appendicitis, appendicular plastron or cecum tumor. Once diagnosed, surgical treatment is required for fear of perforation, tumor evolution and the emergence of the rule of complications. Laparoscopic approach in selected cases can be used, accompanied by safety measures to avoid iatrogenic perforation and peritoneal and parietal seeding.

Key words: appendicular mucocele, laparoscopic appendectomy, pseudomyxoma peritonei