

Case Report of Mucocele Appendix

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Abstract: *Mucocele of appendix, a descriptive term which implies a dilated appendiceal lumen caused by abnormal accumulation of mucus, is a rare clinical entity; the reported prevalence in appendectomy specimens at surgery is 0.2-0.3% and in 8% of appendiceal tumors. They typically occur in middle-aged patients. In literature there is discordance in gender predominance. Some studies show a female-to-male ratio of 4: 1; other studies describe a similar occurrence in women and men. Most common clinical manifestation is a palpable mass in lower right quadrant of abdomen; the patient can present either with or without pain. If a superinfection is present, mucinous cystadenoma may be clinically indistinguishable from nontumoral acute appendicitis. Some patients are asymptomatic; in these cases, mucoceles are found incidentally when imaging is performed for other reasons or during a laparotomy or laparoscopy. In patients with a mucocele, the risk of developing an adenocarcinoma of colon is six times greater than that of the general population. CT imaging shows cystic dilatation of appendix with wall calcification. Superinfection and inflammation shows enhancing wall thickening and surrounding stranding and abdominal lymphadenopathy.*

Keywords: Mucocele, Appendix, calcification, Mucinous

1. Introduction

Mucocele of appendix, a descriptive term that implies a dilated appendiceal lumen caused by abnormal accumulation of mucus, is a rare clinical entity; the reported prevalence in appendectomy specimens at surgery is 0.2-0.3%.¹

Mucoceles of appendix are rare. They are seen in only 0.2%–0.3% of appendectomy specimens and in 8% of appendiceal tumors. They typically occur in middle-aged patients. The female-to-male predilection of as much as 4: 1; other studies describe a similar occurrence in women and men.^{2, 3, 4}

Most common clinical manifestation is a palpable mass in the lower right quadrant of abdomen; the patient can present either with or without pain. If a superinfection is present, mucinous cystadenoma may be clinically indistinguishable from nontumoral acute appendicitis. Some patients are asymptomatic; in these cases, mucoceles are found incidentally when imaging is performed for other reasons or during a laparotomy or laparoscopy. In patients with a mucocele, the risk of developing an adenocarcinoma of the colon is six times greater than that of the general population.³

We report a case of 49 year-old male patient with episodic pain in right iliac fossa for 6 months. Ultrasound was done in private institute show elongated tubular structure in right iliac fossa.

CECT Abdomen shows dilated appendix with foci of appendicular wall calcification.

2. Case Report

A young 49 year-old male patient with episodic pain in right iliac fossa for 6 months who presented to surgery OPD was

sent for radiological investigation. CECT abdomen was done for localization and characterisation.

Ultrasound was done in private institution which show blind ending elongated tubular structure in right iliac fossa.

CECT Abdomen was done which shows cystic dilatation of appendix with appendicular wall calcification.

Patient was operated in department of surgery and diagnosis of mucocele appendix was confirmed.



Figure 1: CECT Abdominal axial image show cystic tubular dilatation of appendix with focus of wall calcification.



Figure 2: CECT Abdominal coronal image show cystic tubular dilatation of appendix with foci of wall calcification

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3. Discussion

Mucocele of the appendix was first described by Rokitansky.⁶ This disease is characterized by dilatation of a lumen as a result of an accumulation of a large amount of mucus. The appendix is lined by epithelium containing more goblet cells than the colon. As a result, most appendiceal epithelial tumors are mucinous and start as mucoceles.⁷ Preoperative diagnosis of appendicular mucocele is very important for the selection of an adequate surgical method to prevent peritoneal dissemination, to prevent intraoperative and postoperative complication, and repeated surgery.⁷ ⁸USG can be used to differentiate between mucocele and acute appendicitis. In case of acute appendicitis, the outer diameter threshold of the appendix is 6 mm, and 15 mm and more indicates the presence of a mucocele, with 83% sensitivity and 92% specificity.⁹ CT is regarded as the most accurate method of diagnostics. CT can be used to discover the signs specific to mucocele with high accuracy: appendix lumen more than 1.3 cm, its cystic dilatation, and wall calcification.¹⁰

4. Conclusion

In conclusion, appendiceal mucocele is a rare disease and has clinically presents as episodic pain in right iliac fossa. A correct diagnosis before surgery is very important for the selection of surgical technique to avoid severe intraoperative and postoperative complications. USG, particularly CT, should be used extensively for this purpose.

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