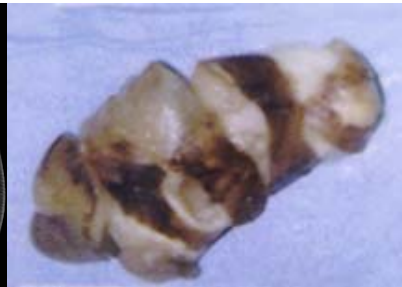
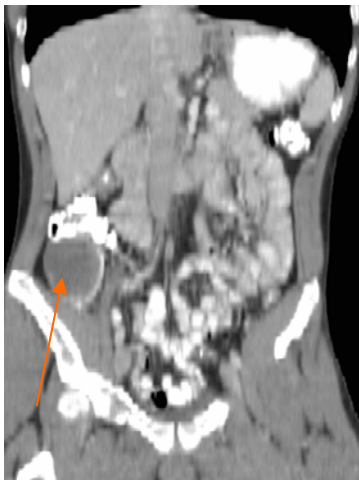


## INTERESTING CASE PRESENTATION



A reformatted coronal image and 2 axial CT images of the abdomen/pelvis show a 4 x 6 cm cystic mass in the RLQ with a calcified wall causing mass effect on the adjacent cecum and loops of small intestine. A photograph of the gross dissected specimen shows a well-circumscribed 10 x 6 x 5 cm "sausage-like" mass.

**Clinical Presentation:** This 20-year-old man presented to **Dr. Brit Smith** with a mobile right lower quadrant mass at the McBurney point with no fever, appetite change, weight loss, or urinary tract symptoms. The patient experienced moderate pain when mass was pushed medially several inches. The mass was not typical of a hernia. Normal lab results.

**Imaging work-up:** **Ultrasound** of the abdomen was performed the same day at AIC (not shown here), which demonstrated a 4 x 6 x 8 cm complex cystic mass in the RLQ but could not exactly localize the mass relative to other structures. The following day, a **CT of the abdomen/pelvis with and without IV and oral contrast** was performed. Selected images are shown above. There is a 4 x 6 x 8 cm predominantly cystic mass in the RLQ causing some mass effect on adjacent cecum and loops of ileum. The mass had a Hounsfield unit of 30-40 without enhancement suggesting proteinaceous fluid content. The cyst wall showed rim calcifications. A normal-appearing appendix was *not* visualized.

**Differential Diagnosis:** DDX of a complex cystic mass in the RLQ includes: appendiceal abscess; cystic neoplasm of the cecum, intestine, appendix, or retroperitoneum; non-specific inflammatory or infectious mass; mucocele of the appendix; bowel duplication cyst; etc. Due to lack of any fever or white count, an appendiceal abscess or other infectious causes were ruled out. A Meckel's diverticulum was ruled out since they usually occur about 2 feet from the cecum. The most likely diagnosis, which was provided to the referring physician based on CT, was mucocele of the appendix due to its location, proteinaceous cystic nature, wall calcification, and lack of visualization of a normal appendix.

**Final Diagnosis:** The patient was taken into surgery the same evening. **Laparoscopic appendectomy** was performed by **Dr. Jawad Bermani** and assisted by **Dr. Brit Smith**. Pathology performed at **Lancaster Community Hospital** revealed a "large distended so-called **MUOCOCELE** consistent with a (benign) **MUCINOUS CYSTADENOMA OF APPENDIX**."

**Discussion:** Mucocele of the appendix refers to distension of appendix with sterile mucus. Its etiologies include obstruction by fecalith, carcinoid, adhesions, and volvulus as well as mucinous cystadenoma/carcinoma of appendix. It has an incidence of 0.07-0.24% reported from age 15 to 80 and is twice more common in men. On CT, it typically presents with a round, sharply defined low attenuation mass with peripheral rimlike calcifications. This case illustrates a case of **mucinous cystadenoma of the appendix with secondary mucocele formation**. **Potential complications:** If not surgically removed, appendiceal mucoceles can potentially rupture and cause **pseudomyxoma peritonei**.

For more information, you may call myself at (661) 949-8111, Dr. Smith at 948-4523, or Dr. Bermani at 948-4571. **If you have any interesting cases, please contact me for a clinical-radiographic case presentation.**

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