doi: 10.26502/acmcr.96550063



Volume 3, Issue 3

**Case Report** 

# **Colonoscopy View of Bulging Appendiceal Orifice**

## Yusuf Nawras<sup>1\*</sup>, Abdullah Kobeissy<sup>2</sup>

<sup>1</sup>Biology undergraduate student, University of Toledo, Toledo, Ohio, USA

<sup>2</sup>Department of Medicine, Division of Gastroenerology and Hepatology, University of Toledo Medical Center, Toledo, Ohio, USA

\*Corresponding Author: Dr. Yusuf Nawras, Biology undergraduate student, University of Toledo, Toledo, Ohio, USA, E-mail: yusuf.nawras@rockets.utoledo.edu

Received: 25 March 2019; Accepted: 09 April 2019; Published: 06 May 2019

#### 1. Case Description

A 62-year-old male presented to the office with chronic right lower quadrant abdominal pain. He denied any diarrhea, constipation or family history of inflammatory bowel disease. Physical exam was unremarkable. A colonoscopy was normal except for a glossy, rounded protruding mass arising from the appendiceal orifice that didn't flatten with air insufflations (Figure 1). Overlying mucosa was normal. Probing with the biopsy forceps reveals a hard lesion. The biopsy revealed normal mucosa. A CT scan was subsequently preformed and reported "a low attenuation, well-encapsulated round cystic mass in the right lower quadrant adjacent to the cecum with no other abnormalities" (Figure 2).

#### 2. Questions Related To Our Case?

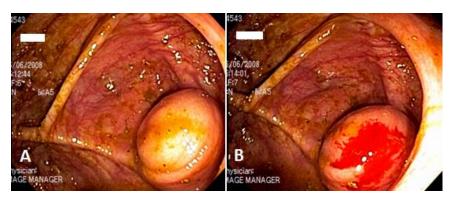
#### 2.1 What is the most likely diagnosis?

- A. Carcinoid tumor of the appendix
- B. Lipoma
- C. Appendiceal mucocele
- D. Adenocarcinoma of the appendix

### 2.2 Which of the following is the next best step in her evaluation and treatment?

- A. Surgery evaluation for right hemicolectomy
- B. Surgery evaluation for appendectomy

- C. Close monitoring with repeat CT scan in 3-6 months
- D. Octreotide scan to determine presence of metastases



**Figure 1 A and B:** Colonoscopy view showing a glossy, rounded protruding mass arising from the appendiceal orifice. Before (A) and after biopsy (B).

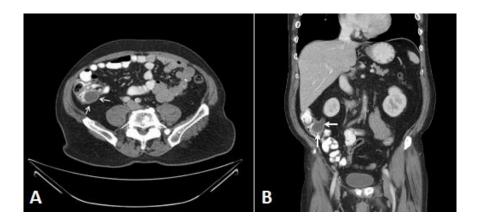
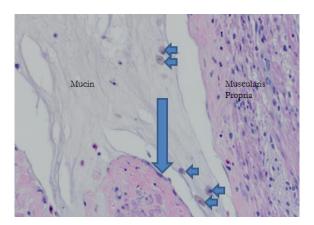


Figure 2: A CT scan of the abdomen cross sectional (A) and coronal (B) showing a low attenuation, well-encapsulated round cystic mass (arrows) in the right lower quadrant adjacent to the cecum.

#### 3. Answers and Discussion

1- C and 2- B. Appendiceal mucoceles are a group of nonneoplastic or neoplastic lesions characterized by characterized by an enlarged, mucus-filled appendix. Retention cysts, mucosal hyperplasia, cystadenomas, and cystadenocarcinomas are the four histological subtypes. They are usually diagnosed in the 6th and 7th decades with a slight female predominance. Clinically, patients are often asymptomatic. Abdominal pain is the most common complaint in symptomatic patients. Incidental lesion found in endoscopic or imaging studies is the most common presentation. A Low attenuation, well-encapsulated round or tubular cystic mass in the right lower quadrant with normal cecum is the characteristic computed tomography (CT) finding [1]. On colonoscopy, appendiceal mucoceles have the appearance of a glossy, rounded protruding mass arising from the appendiceal orifice [2]. Histological exam of the appendix is the essential for diagnosis and excluding underlying malignancy (Figure 3). Differential

diagnosis includes appendicitis, appendiceal tumors, and mesenteric or duplication cyst [2]. Standard appendectomy is the mainstay of treatment for all types except advanced cystadenocarcinomas with local invasion where right hemicolectomy should be considered [3]. Prognosis is favorable. Notably, some studies reported concurrent cancers like colorectal adenocarcinoma, ovary, and endometrium have been reported [4, 5].



**Figure 3:** Mucocele of the appendix. High power view microscopic tumor tissue section showing mucin deposition within the muscularis propria of the appendix. Note the muciphages (small arrows) and attenuated lining epithelium of the mucocele (large arrow). No neoplastic cells. Hematoxylin & Eosin stain.

#### References

- Madwed D, Mindelzun R, Jeffrey RB Jr. Mucocele of the appendix: imaging findings. AJR Am J Roentgenol 159 (1992): 69-72.
- 2. Raijman I, Leong S, Hassaram S, Marcon NE. Appendiceal mucocele: endoscopic appearance. Endoscopy 26 (1994): 326-328.
- 3. Stocchi L, Wolff BG, Larson DR, Harrington JR. Surgical treatment of appendiceal mucocele. Arch Surg 138 (2003): 585-589.
- 4. Kalogiannidis I, Mavrona A, Grammenou S, Zacharioudakis G, et al. Endometrial adenocarcinoma and mucocele of the appendix: an unusual coexistence. Case Rep Obstet Gynecol (2013): 892378.
- 5. Fujiwara T, Hizuta A, Iwagaki H, et al. Appendiceal mucocele with concomitant colonic cancer. Report of two cases. Dis Colon Rectum 39 (1996): 232-236.

**Citation:** Yusuf Nawras, Abdullah Kobeissy. Colonoscopy View of Bulging Appendiceal Orifice. Archives of Clinical and Medical Case Reports 3 (2019): 77-79.



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