

Diagnostic Challenge: A 79-Year-Old Woman with Calcified Lower Abdomen Mass

Quiz

A 79-year-old woman presented with fever, diarrhoea, vomiting and abdominal pain for several hours. Her temperature was 39.2°C, pulse 102 beats/minute, respiratory rate 19 breaths/minute, and blood pressure 149/74 mmHg. A physical examination revealed diffuse abdominal tenderness. Her white blood cell count was 5600/ μ L (band 20%, neutrophil 60%), blood urea nitrogen (BUN) was 48 mg/dL, creatinine 5.6 mg/dL, C-reactive protein 6.19 mg/dL and glucose 177 mg/dL. Computed tomography (CT) scans without enhancement of the abdomen are shown in Figures 1, 2A and 2B.

What is the diagnosis?

- Ruptured mesenteric cyst
- Ruptured right iliac artery aneurysm
- Ovarian tumour
- Ruptured appendiceal mucinous cystadenoma
- Uterine myosarcoma

Answer

The CT scan in Figure 1 shows a ruptured round mass with calcified margin found over the lower abdomen (black arrow). In Figure 2A, a ruptured giant mass with calcified margin was found over the right lower abdomen (black arrow). Ascites were also noted due to a ruptured abdominal mass (white arrow). In Figure 2B, a sagittal reconstruction image of an abdomen CT showed a ruptured round mass with calcified margin above the urinary bladder (white arrow). Emergent laparotomy was performed and an appendiceal tumour measured at 11 x 8 x 6.5 cm³ with a cystic space containing copious mucinous and necrotic materials is seen. The pathologist finally proved that she had benign appendiceal mucinous cystadenoma.

Appendiceal mucinous cystadenoma (AMC) is a rarely seen disease. It only accounted for 0.3% of appendectomies.¹ It is often asymptomatic unless it compressed adjacent structures or ruptured leading to complications. Generally speaking, preoperative diagnosis is rare. For the diagnosis of appendiceal neoplasms, CT plays an important role and CT is the tool of choice. Mural curvilinear calcification occurs in less than 50% of cases, and it helps to diagnose AMC.² The calcified margin may suggest the possibility of an aneurysm and needs to be ruled out. Appendectomy is performed for cystadenomas and mucosal hyperplasia when the appendiceal base is healthy, otherwise, right hemi-colectomy is recommended for cystadenocarcinoma. The open approach is suggested for the surgical treatment of these lesions because of the risk of cystic rupture and

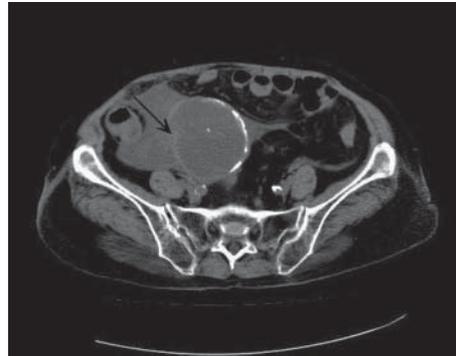


Fig. 1. CT scans showing a ruptured round mass with calcified margin over the lower abdomen (black arrow).

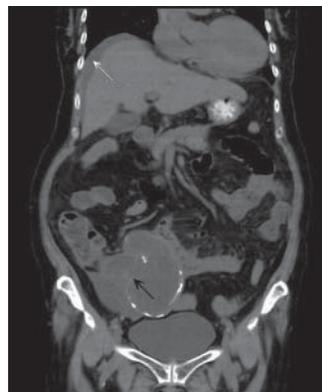


Fig. 2A.



Fig. 2B.

Fig. 2A. CT scan showing ruptured giant mass with calcified margin over the right lower abdomen (black arrow). Ascites was also noted due to ruptured abdominal mass (white arrow).

Fig. 2B. Sagittal reconstruction image of computed tomography (CT) scan of the abdomen showing a ruptured round mass with calcified margin above the urinary bladder (white arrow).

associated peritoneal spreading. Patients with a simple or benign neoplastic mucocele have an excellent postoperative prognosis, with 5-year survival rates of 91% to 100%, even in cases of the extension of mucus into the extra-appendiceal spaces.²

REFERENCES

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