

Giant Peritoneal Loose Body Causing Acute Intestinal Obstruction: Case Report

Y.Zouine^{1*}, N.Mennis¹, C.Gakosso¹, B.Boutakioute¹, M.Ouali Idrissi¹, N.Idrissi¹

¹Radiology Department, Arrazi Hospital, Mohammed VI UH, Cadi Ayyad University, Marrakech, Morocco

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*Corresponding author: Yousra Zouine

Radiology Department, Arrazi Hospital, Mohammed VI UH, Cadi Ayyad University, Marrakech, Morocco

Abstract

Case Report

Peritoneal loose bodies are a rare condition. They are caused by the peritoneal appendages that become inflamed and cause a buildup of material in the peritoneal cavity. This can be hard to spot because it's so rare. The availability of CT scans makes this diagnosis easier. A 77-year-old patient with hypertension and diabetes underwent peritoneal mouse challenge. The patient suffers from acute intestinal sub obstruction. CT scan revealed a mobile calcified density lesion approximately 5 cm in diameter in the peritoneal cavity. Peritoneal loose bodies are a rare complication of omental appendages that have distorted due to ischemic conditions. Laparoscopy excised a firm mass suggestive of primary omental appendicitis. Diagnostic terms for acute or chronic abdominal pain can be found in the general medical literature. Photographs of the affected individual's body show a large greasy or chalky substance.

Keywords: Peritoneal Appendages, Peritoneal Cavity.

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INTRODUCTION

Peritoneal loose body (PLB) or mesenteric mouse arises from a deformed and infarcted epiploic appendage that is detached from the colonic serosa and gradually transforms into a fibrotic or calcified mass. Many of these lesions are discovered incidentally during abdominal surgery or autopsy, however, they may also be detected incidentally on CT scans performed for unrelated conditions. We report on a patient in whom this foreign body was found on imaging conducted for abdominal pain and sub occlusive syndrome.

CASE REPORT

The patient was 77 years old, diabetic, hypertensive, and presented to the emergency room with diffuse abdominal pain from one week ago, and a subocclusive syndrome without fever or alteration of the general state. The clinical examination and laboratory tests were unremarkable. An injected abdominal CT scan showed a large, concentric layered calcified peritoneal formation, visible above the bladder, not depending on the bowel, not enhanced after PDC injection and measuring 5cm in long axis.

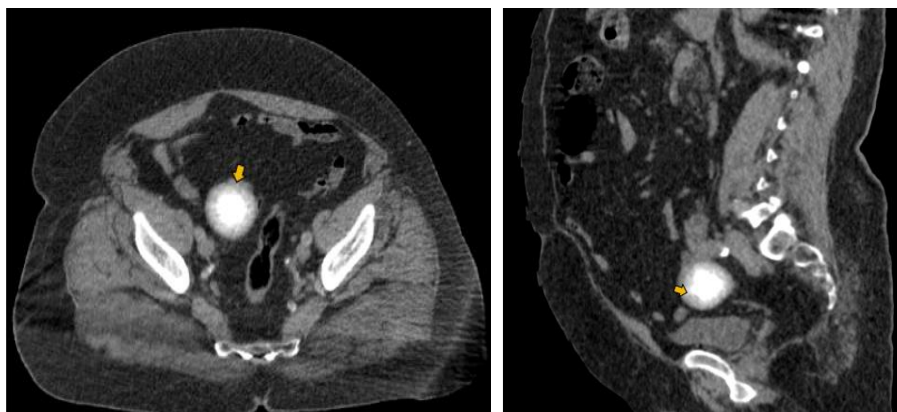


Figure: Abdominal CT at portal time in axial and sagittal section: Voluminous 5 cm, not enhancing calcified peritoneal formation in concentric layers, visible above the bladder

DISCUSSION

Although many possible etiological factors have been proposed to explain the development of mesenteric mice, it is widely accepted that the most common cause is chronic torsion of the epiploic appendage, which eventually detaches from the colon and becomes a PLB. Over the years, the PLB enlarges due to peritoneal reactions. The age of affected patients ranged from 2 months to 79 years at diagnosis. Although there is no predilection for location, these bodies have been found to float most often freely in the pelvic cavity. Mesenteric mice are usually asymptomatic but can be responsible for small bowel obstruction, urinary tract infection, acute urinary retention, intermittent constipation, pelvic pain and abdominal discomfort [1]. The most common radiological finding of a mesenteric mouse is an oval-shaped mass with central calcification and a peripheral area of low density [2]. On abdominal X-ray examination, its appearance has been described as a round or oval calcified mass of mobile nature. CT scan often reveals a well-defined, concentric, round or oval mass with central calcification and surrounded by peripheral soft tissue. It is obviously important to distinguish mesenteric mice from other mobile lesions of the pelvic cavity such as calcified uterine leiomyomas, calcifying peritoneal fibrous pseudotumours, foreign body granulomas, desmoid tumours, teratomas, metastatic ovarian cancer lesions, urinary stones and gallstones. Calcified uterine leiomyomas and calcifying peritoneal fibrous pseudotumours are particularly difficult to differentiate from these mice as they also present as round or oval masses in the pelvic cavity with soft tissue density and irregular calcifications. On magnetic resonance imaging, it appears as a hypointense mass on T1 and T2 weighted images. However, unlike mesenteric mice, leiomyomas and calcifying fibrous pseudotumours are

contrast-enhanced, allowing them to be distinguished [3, 4]. Furthermore, as the bodies are freely mobile, additional scanning with the patient in procubitus or control imaging may demonstrate a change in the location of the mass, facilitating diagnosis with a more accurate diagnosis, facilitating diagnosis with greater confidence.

CONCLUSION

Most PLB reported cases are in the 0.5 to 2.5 cm range, a few cases are larger than 5 cm, in which case they are referred to as giant peritoneal masses. Such masses are usually asymptomatic when small, but they may be large enough to cause external compression associated with intestinal obstruction, urinary retention, or urinary frequency. Imaging features show centrally calcified soft tissue mobile mass, moving to the dependent position of the patient. Usually PLB are asymptomatic but can require surgery if extrinsic compression is causing bowel obstruction or urinary symptoms.

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