

CISTOADENOMA MUCINOSO DO APÊNDICE.

Gastrointestinal

DADOS DO CASO

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Keywords: Appendiceal Neoplasms, Mucocele, Appendix and Pseudomyxoma Peritonei

URL: -

DOI: 10.5935/2965-1980.2024v3e20240051

ABSTRACT

Mucinous cystadenoma of the appendix is a benign neoplasm and the present report is of a 71-year-old woman with pain in the lower abdomen, with onset 3 days ago. The diagnosis was suspected by computed tomography of the abdomen and confirmed by histopathological examination.

CLINICAL HISTORY

A white 71-year-old woman presents with low abdominal pain, mainly right-sided, for 3 days, associated with hyporexia and nausea. On physical examination, she presented positive Blumberg's sign and bloodwork showed a slight leukocytosis, with no other noteworthy alterations. Initial diagnostic suspicion was appendicitis and a computed tomography (CT) scan was performed.

IMAGING FINDINGS

A contrast-enhanced computed tomography (CT) scan was performed, revealing a pericecal cystic mass in the right iliac fossa with parietal contrast enhancement, measuring 5.6 cm along its longest axial axis, associated with adjacent mesenteric fat stranding (Figures 1 and 2), suggestive of an appendiceal "mucocele".

DISCUSSION

Appendiceal mucocele is a general term used to describe the dilation of the appendix lumen due to mucin accumulation, caused by appendiceal epithelial metaplasia. This term encompasses a wide variety of tumors, including mucinous cystadenoma of the appendix [1] [2]. Mucinous cystadenoma of the appendix is a rare benign neoplasm, observed in 0.07 to 0.3% of appendectomies performed in Brazil. It is most commonly found in middle-aged women with no family history, but it can rarely be seen in elderly individuals [4] [5]. Clinical presentation is variable and nonspecific, ranging from asymptomatic cases to right iliac fossa pain, mimicking inflammatory conditions such as acute appendicitis, tubo-ovarian abscess, or even a palpable adnexal mass like ovarian cystic neoplasms or an appendiceal tumor, associated with hyporexia, asthenia, and weight loss [3]. The final diagnosis often differs from the initial diagnostic hypothesis, being usually raised incidentally through imaging studies or intraoperatively [2] [4]. Ultrasound may show an ovoid, pear-shaped cystic mass in the lower right quadrant, with a typical "onion-skin" appearance (internal concentric echogenic layers of mucin) and posterior acoustic shadowing if calcifications are present [2] [3]. CT findings reveal a tubular lesion with a

blunt or ovoid end, contiguous with the cecum and containing homogeneous cystic material. It provides more specific findings compared to other imaging modalities, as it allows for greater precision in lesion delineation, detection of mural calcifications, and assessment of relationships with adjacent structures. [3] [4]. However, in some cases, the imaging findings may not be very specific, making diagnosis a challenge, often deferred to the intraoperative period. Histopathology provides the definitive diagnosis, differentiating it from other types of mucocele, which are not always benign [1]. Surgical treatment is the method of choice in these cases, requiring detailed inspection of the intra-abdominal cavity to evaluate for dissemination or possible perforated areas due to the fragility of tissues affected by the disease. If malignancy is suspected, right hemicolectomy is recommended to reduce the risk of tumor dissemination [2]. In the case presented, the patient underwent exploratory laparotomy and was found to have a gelatinous and brownish appendiceal tumor adhered to the omentum, with characteristics of a mucinous tumor (Figure 3), histologically diagnosed as appendiceal mucinous cystadenoma. It is important to

emphasize that the diagnosis of mucinous cystadenoma of the appendix represents a challenge, requiring awareness of differential diagnoses and their respective characteristics to properly elucidate each case"

DIFFERENTIAL DIAGNOSIS

- Acute appendicitis
- Tubo-ovarian abscess
- Neuroendocrine tumour
- Ovarian cystic neoplasms
- Peritoneal inclusion cyst

TEACHING POINTS

It is important to emphasize that, although mucinous cystadenoma of the appendix is a benign condition, it presents a diagnostic challenge, as the initial hypothesis in most cases is acute appendicitis. Therefore, the authors present this clinical case to highlight the need for thorough investigation and consideration of alternative diagnoses to ensure optimal patient management.

REFERENCES

1. Nutu OA, Quinto AAM, Municio AM, Alonso IJ, Pulido JC, García-Conde M, Molero FC, Romero LCJ (2017) Mucinous Appendiceal Neoplasms: Incidence, Diagnosis and Surgical Treatment. *Cirugía Española (English Edition)* 95 (6): 321-327. doi: 10.1016/j.ciresp.2017.05.008 (PMID: 28655402)
2. Honnef I, Moschopoulos M, Roeren T (2008) Appendiceal Mucinous Cystadenoma. *RadioGraphics* 28 (5): 1524-1527. doi: 10.1148/rg.285075160 (PMID: 18794324)
3. Santos SF, Horta M, Rosa F, Rito M, Cunha TM (2022) Mucocele of the appendix: what to expect. *Radiol Bras* 55(3): 193-198. doi: 10.1590/0100-3984.2021.0075 (PMID: 35795599)
4. Pickhardt PJ, Levy AD, Rohrmann Jr CA, Kende AI (2003) Primary neoplasms of the appendix: radiologic spectrum of disease with pathologic correlation. *Radiographics* 23(3):645-62. doi: 10.1148/rg.233025134 (PMID: 12740466)
5. Andrade, CF; Santo, PRQE; Pantaroto, M; Spadella, CT. Cistoadenoma mucinoso do apêndice: relato de caso. *Acta Cirurgica Brasileira, [S.L.]*, v. 16, n. 4, p. 251-254, dez. 2001. *FapUNIFESP (SciELO)*. <http://dx.doi.org/10.1590/s0102-86502001000400011>.

FIGURES

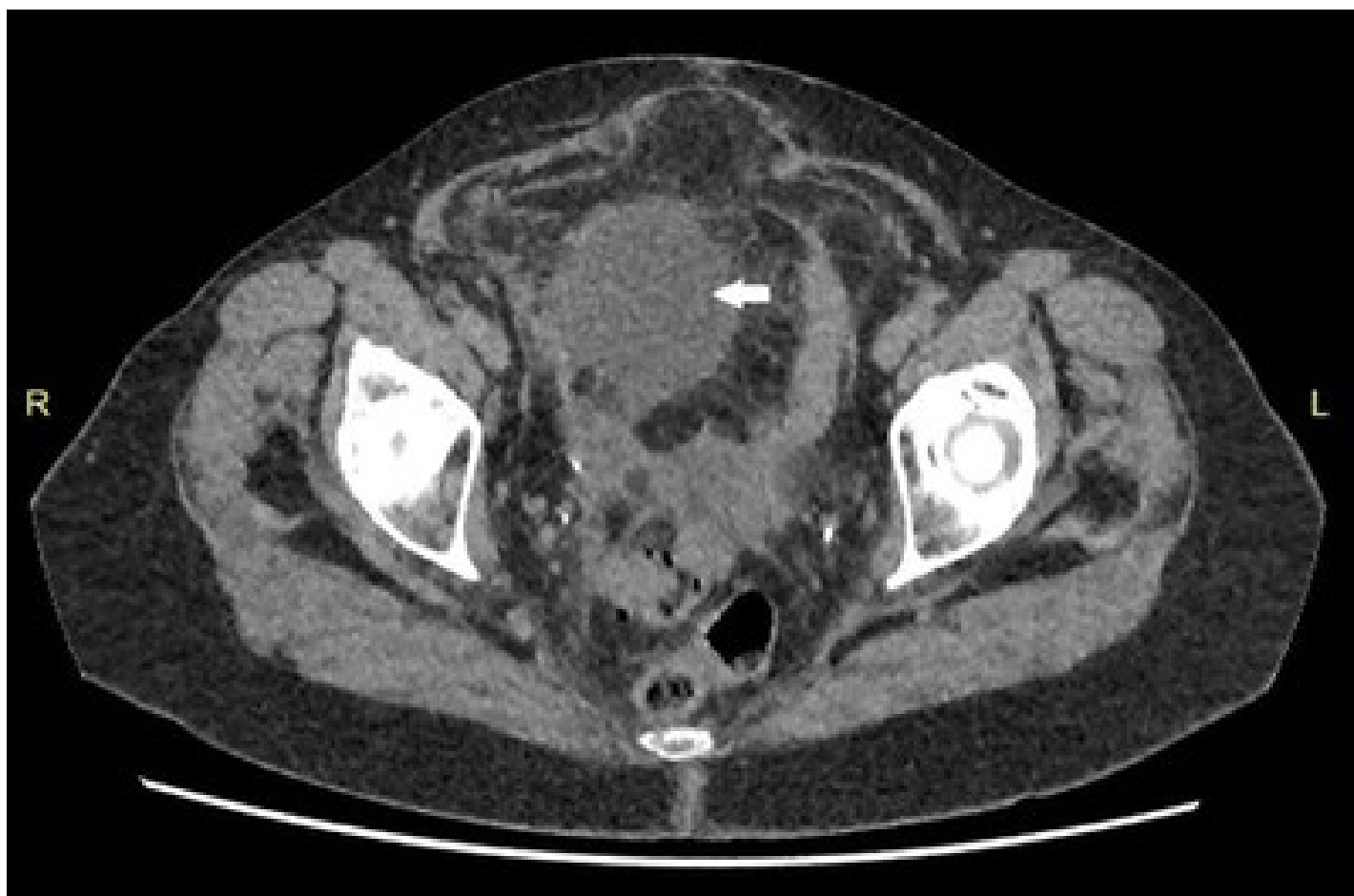


Figure 1: CT revealing a pericecal cystic mass in the right iliac fossa, associated with adjacent mesenteric fat stranding.

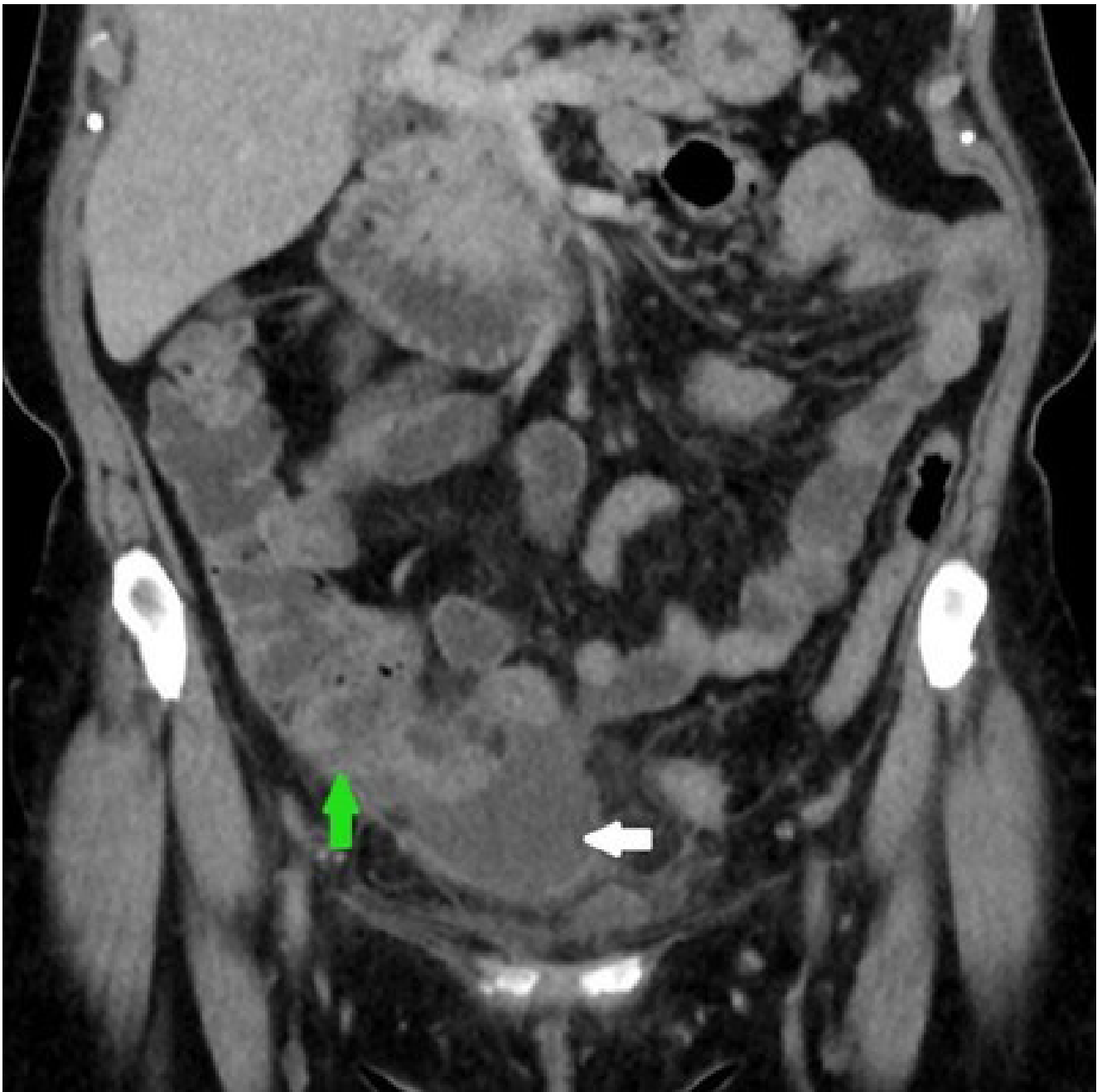


Figure 2: CT scan of the abdomen and pelvis with portal phase contrast, coronal reconstruction, showing a hypodense ovoid structure (white arrow) adjacent to the cecum (green arrow).

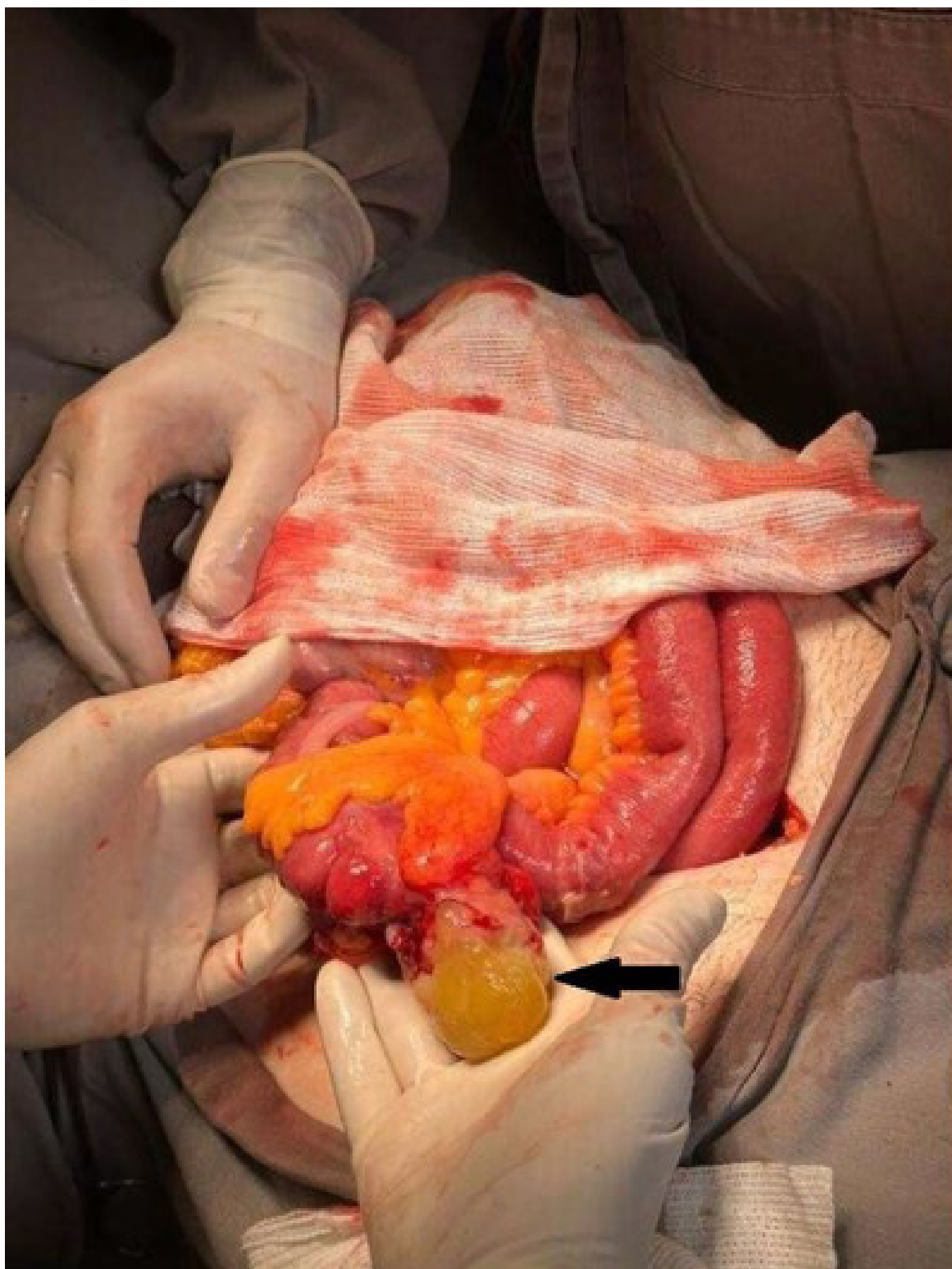


Figure 3: Surgical specimen of the appendix (black arrow), dilated, gelatinous and brownish (Appendicular Mucinous Cystadenoma).