International Journal of Medical Science and Clinical Research Studies

ISSN(print): 2767-8326, ISSN(online): 2767-8342

Volume 03 Issue 07 July 2023

Page No: 1473-1475

DOI: https://doi.org/10.47191/ijmscrs/v3-i7-43, Impact Factor: 6.597

Intestinal Intussusception Secondary to Appendiceal Mucocele, Report of a Case in A 53-Year-Old Female

Unzueta Jocelyn[1], Amezcua Miguel[2]

[1]Zone General Hospital #33 Monterrey, Nuevo León.

[2]Regional Hospital 270 Reynosa, Tamaulipas.

ABSTRACT

Appendiceal intussusception is defined as the invagination of a portion of the appendix into its own lumen or into that of the cecum. In adults, the most common etiology is endometriosis (33%), followed by appendiceal mucocele (19%) and appendiceal inflammation (19%) [4]. Symptoms may be absent or mild. Lower abdominal pain or mass may be confused with appendicitis or tuboovarian mass in women. The diagnosis of appendiceal mucocele is often difficult preoperatively, even with the use of imaging. The definitive diagnosis is by histopathology. Treatment is surgical resection with care.

Do not spill the contents, to prevent peritoneal pseudomyxoma with a poor prognosis [2].

In the present work, a 53-year-old female is reported with a 72-hour evolution of abdominal pain in the mesogastrium, accompanied by nausea and vomiting, normal vital signs on physical examination, without acute abdominal symptoms, with laboratories within normal parameters. , a computed tomography of the abdomen is taken which reports extensive intussusception at the ileocecal level which extends to the transverse colon, adjacent neoplastic etiology must be ruled out. An exploratory laparotomy was performed, finding intussusception of the ileum in the transverse colon with a 5 x 5 cm blind sentence, for which it was decided to perform a right hemicolectomy + mechanical lateral ileotransverse anastomosis. Patient with favorable evolution, hospitalized for 6 days,

KEYWORDS: Intussusception, mucocele, mucinous tumor, appendix, intussusception, occlusion.

ARTICLE DETAILS

Published On:
31 July 2023

Available on:
https://ijmscr.org/

INTRODUCTION

The term mucocele refers to a cystic dilatation of the appendix with accumulation of mucinous material. It can be caused by a benign or malignant process. Currently, the term mucocele is outdated and the term neoplastic appendiceal mucinous lesions is preferred. These lesions are a rare disease. The most common form of presentation is pain in the right iliac fossa, simulating acute appendicitis. Therefore, the definitive diagnosis is obtained from pathological examination. In advanced cases, the disease can spread to the peritoneal cavity in the form of semisolid adhesive mucin, greatly worsening the prognosis of the tumor [3].

Ileocecal/ileocolic intusception caused by appendiceal mucocele is an extremely rare condition with few case reports in the literature. Treatment is surgical with the extent determined by intraoperative findings [2].

CASE REPORT

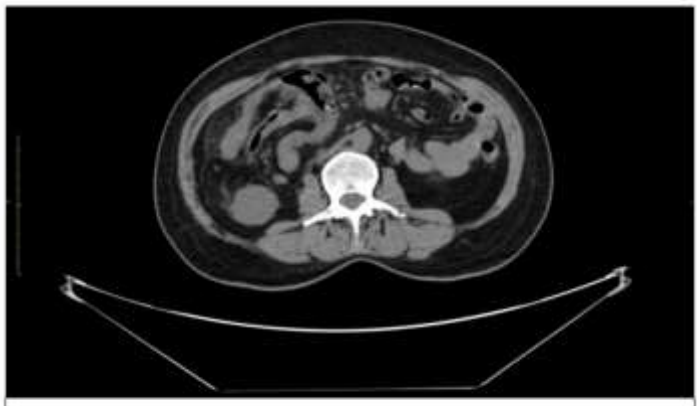
A 53-year-old female patient with the following personal pathological history: Systemic arterial hypertension of 3 years of evolution, Rheumatoid arthritis of 8 years of evolution, Allergic to ciprofloxacin, surgical denied, pregnancy: 2, delivery: 2. Personal non-pathological: smoking denied, alcoholism denied.

Starts current condition 72 hours prior to arrival at the emergency room with abdominal pain eva 7/10 in mesogastrium after ingestion of irritants, treated with NSAIDs without improvement, accompanied by nausea and vomiting, denies fever, last evacuations of liquid characteristics two days prior, later I no longer evacuate. Therefore, he went to the emergency room.

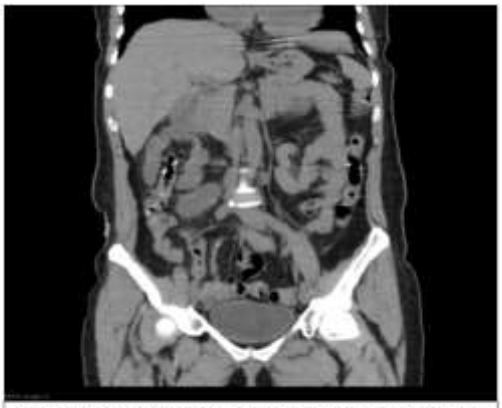
On physical examination, conscious, oriented, good skin color, well-hydrated mucous membranes, chest with good air inlet and outlet, heart sounds of good tone and rhythm, soft, depressible abdomen, painful on palpation in the mesogastrium, with no signs of irritation. peritoneal, peristalsis present.

CT of the abdomen: Extensive invagination at the ileocecal level is identified, which extends to the transverse colon. Without occlusion data at the time of the study, adjacent

neoplastic etiology must be ruled out. Low free fluid in the pelvic cavity, simple liver and kidney cyst



Axial section showing intussusception of the distal ileum in the cecum and ascending colon



Coronal section showing intussusception of the distal ileum in the cecum and ascending colon

Laboratories: leukocytes 6.45, neutrophils 70.2%, hemoglobin 10.14 mg/dl, hematocrit 33.8%, VCM 69.6, MCH 20.8, Platelets 254.6, BUN 16, Magnesium 2.12, glucose 84, creatinine 0.72, urea 34.2, albumin 4.4, sodium 140 , potassium 4, calcium 9.3, chlorine 109, ca 125: 32.27, ca 15.3: 12, ca 19.9: 1.89, AFP: 2.20, ACE: 3.41.

Integrating diagnosis of: Intestinal intussusception

Exploratory laparotomy was programmed, suprainfraumbilical incision was made, ileal invagination was detected in the transverse colon, scant free fluid, loops without ischemia data, 5 x 5 cm tumor in the cecum, right hemicolectomy + mechanical side-lateral ileotransverse anastomosis was performed .

Patient hospitalized for 6 days, with favorable evolution, is discharged and comes two months later due to pathology, remaining asymptomatic.

Pathology report: 8 x 1.2 appendix, in the proximal third just in the appendiceal orifice, a 3.5 x 3 cm tumor that completely obstructs the lumen. The sample contains ileum, 14 x 2.5 cm, cecum and ascending colon, 12 x 6 cm.

Low-grade mucinous neoplasm of the appendix, with acellular mucin lakes dissecting the submucosa and partially the muscularis propria. Resection margins free for neoplasia. Lymph nodes (4) negative for neoplasia. No neoplastic implants in pericolic adipose tissue.

DISCUSSION

Appendiceal mucocele is a descriptive term given to cystic dilatation of the appendix as a result of obstruction by benign or malignant pathology and is seen in 0.2 to 0.7% of appendectomies. It is classified into retention cysts, mucosal hyperplasia, mucinous cystadenoma, and mucinous cystadenocarcinoma.

At present, the term mucocele is obsolete and mucinous appendiceal neoplasm is preferred. Mucinous appendiceal neoplasm is a rare pathology that occurs predominantly in middle-aged women [3].

Most patients are asymptomatic or present with acute or chronic lower abdominal pain and a palpable mass in the right lower quadrant, leading to diagnostic confusion with appendicitis. In women, it can be difficult to distinguish from adnexal pathology with a palpable pelvic mass, on imaging or even intraoperatively. They may also present changes in bowel habits, nausea, vomiting, genitourinary symptoms due to local compression. It can also present with intussusceptions, rectal bleeding, and intestinal obstruction. Secondary ileocecal/ileocolic intussusception mucocele is a rare clinical scenario with limited case reports [2].

The differential diagnosis may include mesenteric cyst, ovarian tumors, tuboovarian abscess, appendiceal periabscess, intussusceptions due to colonic mass, and enteric duplication cyst [2].

The definitive diagnosis is by histopathological examination. The sonographic characteristic of a mucocele includes an “onion skin” appearance, nodular enhancement of the wall, and a diameter greater than 1.5 cm. Once the mucocele is seen on imaging, colonoscopy should be performed to rule out synchronous colonic lesions that can be seen in 13-42% of appendiceal neoplasms and cecal invasion by appendiceal tumors.

The CT appearance of intussuscepted mucocele is rarely reported with few reports in the literature. The finding consists of a low-density tubular mass in the colon with peripheral calcification and a portion of the small bowel mesentery pushed into the colon.

Although not specific, tumor markers such as CEA, CA 19-9, and CA-125 should be determined after mucocele diagnosis and repeated to monitor disease progression. [2] Available data suggest that tumor markers are elevated in the majority of patients with advanced appendiceal mucinous tumors, and levels correlate with treatment outcomes. These markers are useful in terms of prognosis because elevated levels at the time of appendectomy could indicate an increased risk of recurrence or death. [3]

Once the diagnosis has been made, early surgical resection of all is recommended to exclude mucinous neoplasia and prevent spontaneous rupture of poor prognosis. There is no consensus on the optimal surgical procedure for mucocele. Currently, the standard surgical treatment is open surgery, despite growing evidence in favor of the laparoscopic approach. The extent of surgery should be guided by the pathologic diagnosis and depends on several factors such as tumor size, location, mucin content, ileal and cecal involvement, lymph node involvement, and margin status. Abdominal exploration should also exclude coexistent ovarian and colon tumors [2].

Treatment based on the intraoperative finding can be simple appendectomy if the base is free, partial cecectomy, ileocecectomy or right colectomy if the base is compromised following oncological principles. Reduction to allow limited resection is not

Recommended for intussusceptions caused by mucocele to prevent rupture, for which right colectomy is the treatment.

For non-neoplastic mucinous lesions, appendectomy is sufficient even if it ruptures. The prognosis depends on the presence and extent of peritoneal invasion and dissemination that can determine recurrence. The 5-year survival rate for simple mucocele is 91-100% and drops to 25% for malignant after appendectomy [2].

It is important that follow-up of these include colonoscopies, since up to 20% of benign appendiceal cystadenomas are associated with colorectal cancer [4].

CONCLUSIONS

The mucocele of the appendix is a very rare pathological entity that is usually discovered incidentally during surgery. It can result from non-neoplastic and neoplastic lesions and histopathological examination is required for confirmation. They typically occur during the sixth decade of life, although the age range is wide (50-70 years); more common in women and presents as a palpable mass in the right lower quadrant of the abdomen with or without pain [3].

In adults, CT is the test of choice, which identifies a bull's-eye image associated with a well-encapsulated cystic mass in the cecum.

Surgical treatment varies from appendectomy to right hemicolectomy depending on the etiology and degree of intussusception. When the cause of the intussusception is an appendiceal mucocele, it is not recommended to reduce intussusception due to the high risk of exposure of the peritoneal cavity to mucin-producing cells. Therefore, in our patient a right hemicolectomy + ileotransverse anastomosis was decided [4].

REFERENCES

I. Arfi, Ileocolic intussusception caused by appendiceal mucocele, Available from, 2021 Apr 7,https://www.eurorad.org/case/17242.

II. Bejiga, G. (2022). Appendiceal mucocele presenting as a leading point in ileocolic intussusceptions: “Case report”. International Journal of Surgery Case Reports, 96, 107307.https://doi.org/10.1016/j.ijscr.2022.107307

III. B. Matias-García, F. Mendoza-Moreno, A. Blasco-Martínez, JI Busteros-Moraza, M. Diez-Alonso, F. Garcia-Moreno Nisa, A retrospective analysis and literature review of neoplastic appendiceal mucinous lesions, cited 2022 Apr 17, BMC Surg [Internet] 21 (1) (2021 Dec) 79,https://doi.org/10.1186/s12893-021-01091-9.

IV. E. Sagarra Cebolla, EA Velasco Sa´nchez, L. Go´mez Lanz, E. Burgos de la Obra Ferrari, Ileocolic Intussusception by Appendicular Mucocele, Available from, Cirugía Espan˜ola (English Edition) [Internet]. 96 (4) (2018 Apr) 244–245, http://linkinghub.elsevier.com/retrieve/pii/S2173507718300668.

V. M. Singh, A general overview of mucocele of appendix, Available from, J Family Med Prim Care [Internet] 9 (12) (2020), 5867,https://journals.lww.com/jfmpc/Fulltext/2020/09120/A_general_overview_of_mucocele_of_appendix.9.aspx.

VI. Z. Teke, I. Eray, E. Aydin, A. Ortlek, Appendiceal intussusception caused by mucinous cystadenoma presenting as acute appendicitis, Available from, Annals [Internet] 102 (4) (2020 Apr), e1–4, https://doi.org/10.1308/rcsann.2020.0001.