

Low Grade Appendicular Mucinous Neoplasia: Case Report

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ABSTRACT

Secondary and primary neoplasms of the appendix are rare tumors found in approximately 1% of appendectomy specimens, with epithelial and neuroendocrine tumors being more frequent. (1). Epithelial adenocarcinoma is the most common malignancy with mucinous (37%) and non-mucinous (27%) histological subtypes. We present a clinical case.

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INTRODUCTION

Secondary and primary neoplasms of the appendix are rare tumors found in approximately 1% of appendectomy specimens, with epithelial and neuroendocrine tumors being more frequent. (1). Epithelial adenocarcinoma is the most common malignancy with mucinous (37%) and non-mucinous (27%) histological subtypes¹. Between the 4th and 5th decade of life is the most common age of presentation with acute appendicitis 30-50%, more common in neuroendocrine than in epithelial, less frequent symptoms are abdominal pain, palpable mass, SDBT, intestinal occlusion^{picture 1}. According to the AJCC and the PSOGI the classification for appendicular mucinous tumors are: 1) Polyp or Adenoma with or without dysplasia, 2) Low Grade Mucinous Neoplasm 3) High Grade Mucinous Neoplasm 4) Mucinous Adenocarcinoma with Seal Ring Cells 5) Carcinoma with Seal Ring Cells¹. The treatment of choice is surgical and can range from appendectomy to right hemicolectomy + HIPEC^{2,3}.

CLINICAL CASE

Male 39 years old, Married, no family history, Drug addiction (-) Smoking (-) Alcoholism (-) Phenotype A+, No APP referred, Hospitalizations (-). He began a picture about 45 days ago, with intermittent pain in the right Iliac Fossa, he also reported feeling a mass in this region with a gradual increase in size, he received treatment in an unspecified Private environment, without improvement, he went to take a CT scan by his own means and later entered this hospital on 06/18/2020 for CT findings. EF: Palpable tumor in non-

mobile FID, approx 10 cm, no peritoneal irritation or appendicular signs. Admission paraclinicals: (18/06/2020) HB: 15.0 mg/dl Hto: 41.3 % Vcm: 80 Pla: 284,000 WBC: 14,600 Neu: 75% Tp: 17 INR: 1.44 TPT: 29 Glu: 99mg/dl Cr: 1.0 Urea: 30 Alb: 3.7mg/dl, PCR: 25 mg/dL, ACE: 7.3 ng/ml.

CLINICAL MANAGEMENT

Abdomino-pelvic tomography. Low density lesion, with partial thin wall, discontinuous calcification, ovoid morphology, is located on the right side of the abdomen, at the site of the cecum and ascending colon, liquid content with 19 IU. Well-defined edges, Maximum Dimensions of 101 x 59 x 58 mm, displacing the right colon forward and medially, peripheral fat of the lesion with increase in its density, scarce fluid in the bottom of the sac, abdominal wall, liver, spleen, stomach, loops small intestine, kidney, pancreas and large morphol vessels normal ogía (photo 1 and 2). For not presenting acute abdomen, nor data of abdominal sepsis, patient is passed to the floor of General Surgery for approach, protocolized for Exploratory Laparotomy, ASA I is granted by Anesthesiology, presurgical tumor markers ACE, Ca 19-9 and Ca-125 (125) are taken finding the following findings and histopathological report

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Figure 1. lesions on CT.



Figure 2. Lesions on CT.

Cecum-dependent tumor approx 15 * 6 * 4 cm subserosal, with mucinous material in right side and with perforation in the upper pole of tumor, no peritoneal implants are observed in omentum or peritoneum, macroscopically without metastatic disease. Right Hemicolectomy + Olyctomia + Anastomosis Term -Lateral Ileo-Transverse Manual with Vicryl 3-0 Connel-Mayo and Second Plane with Lembert with Silk 2-0 Preliminary Pathology Report: Cecum-dependent tumor, with regular and smooth edges, with

perforation in distal third, without cecal appendix, with abundant mucoid tissue inside, to the histological cuts with invasion to the muscularis propria, 14 nodes in total, without metastatic invasion, proximal and distal surgical edges, free, omentum without atypia in the cuts. Peritoneal fluid cytology: Eosinophilic proteinaceous background with reactive mesothelial cells, abundant polymorphonuclear, negative to malignancy (photos 3, 4 and 5).



Figure 3. Mucinous material

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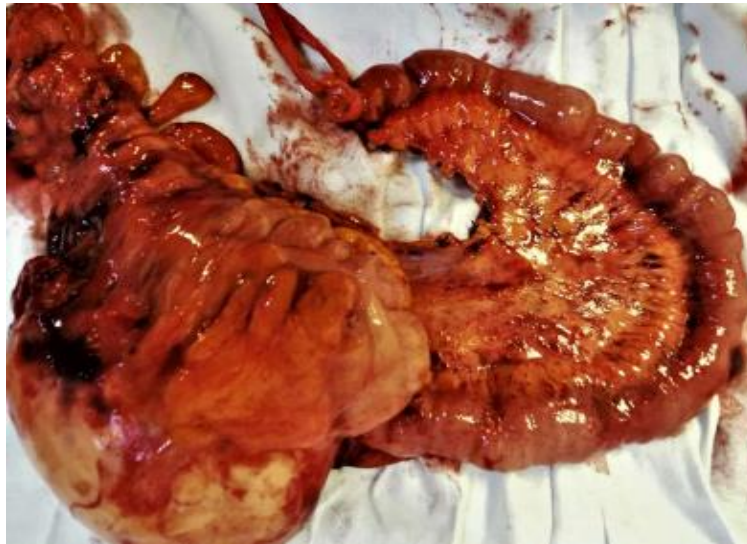


Figure 4. Surgical piece

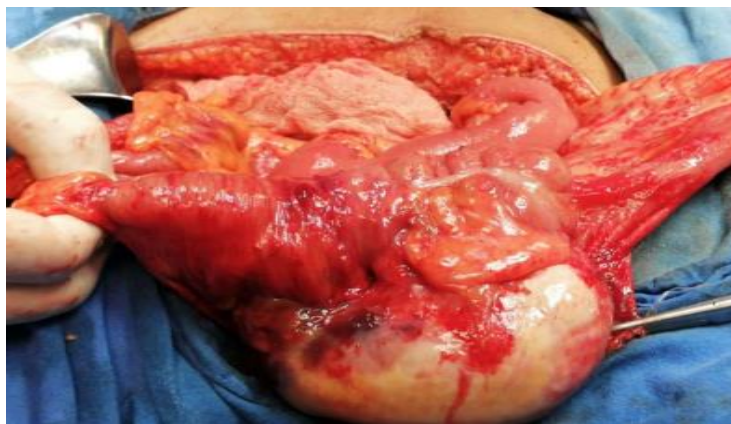


Figure 5. Surgical Piece

CONCLUSIONS

Appendicular tumors of any histological lineage are a rare pathology, however, given the suspicion of this, an early approach is necessary, in terms of surgical management, because the lymphatic dissemination in well-differentiated appendicular tumors is less than 2%, a simple appendectomy is sufficient, however cytoreductive surgery has to be considered, with right hemicolectomy in tumors that invade the periappendicular area, greater than 2cm, high-grade histology or tumor that invades the muscularis propria, perforation, all patients with these criteria have to be managed with right hemicolectomy². According to histopathological findings it is classified as a T2N0M0G1 stage I tumor, combining cytoreductive surgery + HIPEC overall 5-year survival was 86% for disease with peritoneal mucinous spread and 50% for more aggressive histology with mucinous carcinomatosis peritoneal, with incomplete surgical resection falls to 20%, globally at 10 years survival is 32% in low grade 2 neoplasms, so it will be necessary to continue with close monitoring and assess the possibility of subsequent HIPEC in case of data of recurrence data.

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