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Case Report

Sister Maria Jose's nodule as a presentation of a strangulated umbilical hernia

Yazmin G. González*, Rodolfo I. Lopez, Rodrigo Villarreal, Reyger G. Hernandez, Alexis Cruz

Department of General Surgery, Hospital General Regional Mérida T1 - Instituto Mexicano del Seguro Social, Mérida, Yucatán, México

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***Correspondence:**
Dr. Yazmin G. González,
E-mail: dra.giselle.gonzalezf@gmail.com

ABSTRACT

The "sister María José" umbilical nodule is a metastatic nodule associated with advanced digestive and gynecological tumors. Skin metastases due to gynecological tumors are not frequent, they only represent 1 to 3% of patients with intra-abdominal cancer and in most cases, they have a poor prognosis. One of the most common types of skin metastasis is the one that occurs at the umbilical level. A case of sister María José nodule is presented as a presentation of a strangulated umbilical hernia in a 67-year-old female patient with a history of ovarian cancer. Exploratory laparotomy was performed with the findings of: tumor in the abdominal wall measuring 10×7×6 cm. The histopathological result is carcinoma with a mucoproducing tubulopapillary pattern. With satisfactory post-surgical evolution and discharged home after 72 hours. Although the initial diagnosis in this patient was a strangulated umbilical hernia due to the clinical presentation and the ultrasound report, we were able to conclude that the definitive diagnosis was "sister María José nodule due to the result of the histopathological report and the history of ovarian cancer 6 years previous.

Keywords: Sister María José nodule, Periumbilical nodule, Skin metastasis, Gynecological cancer metastasis

INTRODUCTION

The "sister María José" umbilical nodule is a metastatic nodule associated with digestive tumors in 52% and advanced gynecological tumors in 28%.[1-3]

Skin metastases due to gynecological tumors are not frequent, they only represent 1 to 3 % of patients with intra-abdominal cancer 1-2, with a frequency of the primary stomach tumor of 25%, ovary 12%, colon and rectum 10% and pancreas 7% 3, in most cases, have a poor prognosis. One of the most common types of skin metastasis is the one that occurs at the umbilical level.[1]

It presents as a nodular-looking tumor with a firm and irregular consistency, usually causing pain on palpation and sometimes presenting with ulcerations with serous or bloody secretion as well as a necrotic center. Its spread is mainly through the lymphatic route.[3]

CASE REPORT

A 67-year-old female with a personal history of high blood pressure, diabetes mellitus type 2, with a surgical history of hysterectomy plus bilateral oophorectomy secondary to ovarian cancer of histological undifferentiated carcinoma type in 2018 with adjuvant management with chemotherapy. Patient presents umbilical hernia with an evolution of 6 months, 48 hours prior it begins with color changes in the umbilical region without other additional symptoms. Upon admission to the emergency department, physical examination revealed a globose abdomen at the

expense of the adipose panniculus, with the presence of an umbilical hernia with color changes, with a defect of approximately 6 cm on palpation (Figure 1), with no evidence of peritoneal irritation. Therefore, it was decided to perform an abdominal ultrasound, which reported a defect at the level of the umbilical scar through which intestinal structures of colonic appearance pass, with lumen with abundant gas and waste material. These structures do not present peristalsis or flow on Doppler palpation. Presumptive diagnosis: data regarding strangulated umbilical hernia.

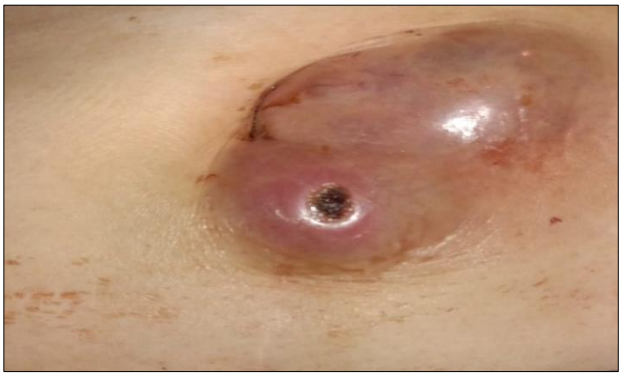

Figure 1: Lesion in the umbilical region with irregular edges, change in color and necrotic center.

Due to the ultrasound findings suggestive of strangulated umbilical hernia, surgical management was decided. Exploratory laparotomy was performed (Figure 2) with the findings of a tumor in the abdominal wall measuring 10×7×6 centimeters covering navel skin with necrotic ulcer, no involvement of intestinal loop was found, so en bloc resection was decided (Figure 3), the specimen is sent to pathology with the following report: Abdominal tumor: Carcinoma with mucoproductive papillary tubule pattern, in the umbilical area with history and clinical data of the patient tumor described as "sister María José nodule" (Figures 4 and 5).

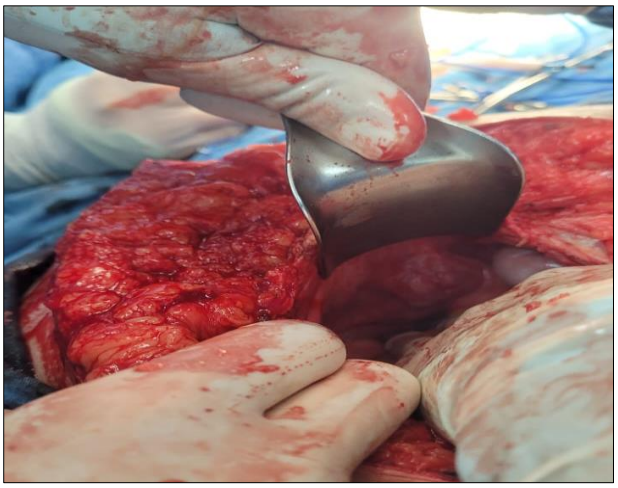

Figure 2: Tumor in the abdominal wall without intestinal involvement.

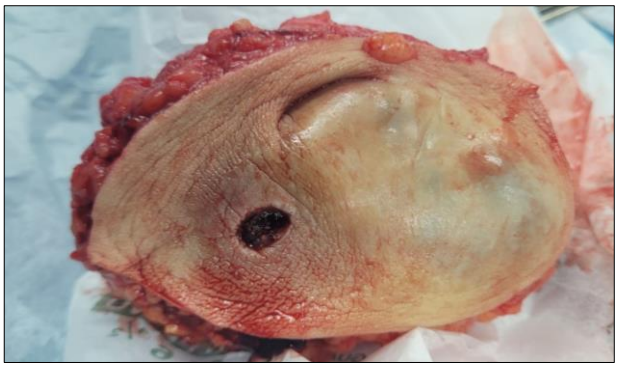

Figure 3: En bloc resection of abdominal wall tumor.

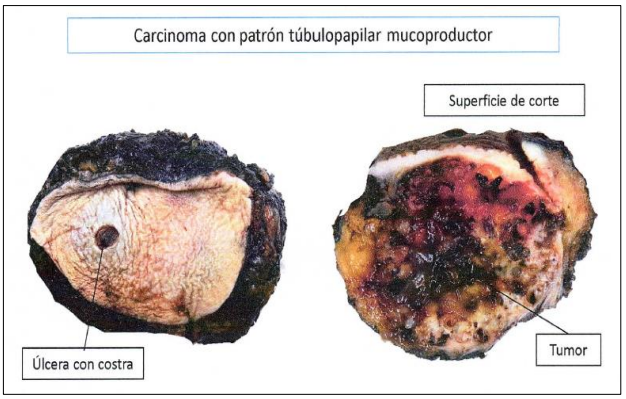

Figure 4. Surgical piece. Ovoid specimen measuring 10×7×6×6 cm with ulcer covered by scab measuring 1×0.8 cm. Subcutaneous tumor measuring 9.8×7×6 cm with a heterogeneous surface with dark brown areas of semi-firm consistency that alternate with cystic areas of soft and translucent content.

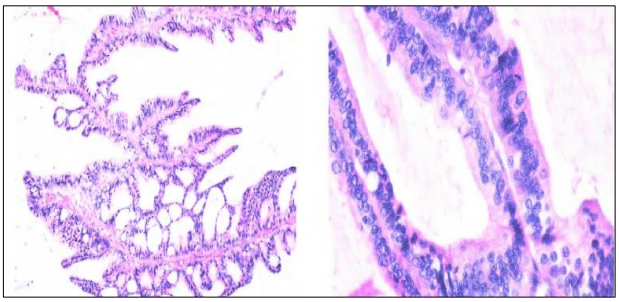

Figure 5: Histological sections. Tubulopapillary pattern, neoplastic cells in cysts covered with neoplastic epithelium with abundant mucus inside, with loss of polarity, eosinophilic cytoplasm, basophilic ovoid nuclei, with evident nucleoli anisonucleosis and membrane irregularity.

In the postoperative period, it was managed with analgesia and antibiotic therapy, with 72-hour in-hospital surveillance with good evolution, so it was decided to discharge home. During outpatient follow-up, a healed wound was observed, with no signs of infection, dehiscence or necrosis (Figure 6).

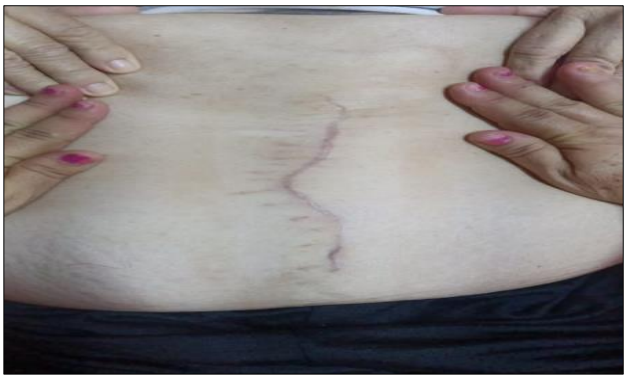

Figure 6: Healed wound. Follow-up in external consultation.

DISCUSSION

Ovarian cancer represents 3 to 4% of tumors in women worldwide. It is the fourth cause of death from cancer in women, since it is usually diagnosed in advanced stages. There are 3 types of ovarian cancer, the most common being epithelial carcinoma, representing 85 to 90% of ovarian cancers.[7]

The name of the metastasis of intra-abdominal malignant tumors "sister María José nodule" was given by surgeon Hamilton Bailey in honor of sister María José, who observed that there was a clinical correlation between the umbilical nodule and intra-abdominal tumors.[1,2]

Metastases from intra-abdominal and pelvic tumors with dissemination to the umbilical region have dissemination mainly through the lymphatic route due to their drainage to para-aortic lymph nodes, however they can also spread through continuity or embryological remnant.[2]

It presents as a subcutaneous nodule, firm, indurated, painful on palpation, which can ulcerate, fissure and generate a mucoid or hemorrhagic exudate, generally measuring less than 5 cm.[5] Its definitive diagnosis is carried out based on the results of a histopathological study.[6]

Skin metastases secondary to ovarian cancer usually appear within an average of 24 months after the main diagnosis. The appearance of the nodule demonstrates a sign of advanced malignant disease, with survival between 4 and 12 months after diagnosis; however, survival increases in patients managed with local excision plus chemotherapy.[1]

According to the bibliography, the "sister María José nodule" is 34% of gynecological origin, with the ovarian being the most frequent. In this case, our patient presented a primary ovarian tumor in 2018, treated with surgical recession. (hysterectomy plus bilateral oophorectomy) plus chemotherapy, however 6 years later she presented a tumor in the umbilical region corresponding to sister María José's nodule, metastasis from the primary tumor.

CONCLUSION

We confirmed that our patient had this type of metastasis by having the histopathological report and by the history of ovarian cancer, in this particular case the survival increased since the primary tumor was treated with surgical management and chemotherapy.

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