



Sister Marie Joseph's Nodule Revealing an Adenocarcinoma of Excreto-Biliary Origin: Apropos of a Case.

F. Zahra Cheikhna *¹, Cherif Mini², M Yeslem Madi³, Ahmed Ballati⁴

1,2,3,4. Gastroenterology Department Visceral Surgery Department, Imaging Department, Military Hospital, Nouakchott Mauritania.

Corresponding Author: F. Zahra Cheikhna, Gastroenterology Department Visceral Surgery Department, Imaging Department, Military Hospital, Nouakchott Mauritania.

Copy Right: © 2022, F. Zahra Cheikhna, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Received Date: September 22, 2022

Published Date: October 01, 2022

Abstract

The Sister Marie-Joseph nodule (SMJ) is an umbilical cutaneous metastasis of cancer, most often digestive. The primary tumor is usually an adenocarcinoma, rarely a squamous cell carcinoma, a melanoma or a sarcoma. It is a rare metastatic umbilical lesion, which occurs in 1 to 3% of abdominopelvic adenocarcinomas. Most often it is the stomach, the ovary, the colon and the pancreas. Bile duct and small intestine involvement are very rare locations. Its discovery should lead to the performance of a skin biopsy and an abdomino-pelvic CT scan. Therapeutic possibilities include surgery and/or chemotherapy, but most often the management is palliative. The prognosis remains poor because the discovery is most often late.

Key words; *Umbilical nodule, metastasis, adenocarcinoma, Sister Marie-Joseph, Excretory-biliary tumor.*

Introduction

The nodule of Sister Marie-Joseph is a cutaneous metastasis located at the level of the umbilicus, present in 1 to 3% of abdominopelvic adenocarcinomas (1). It has been described by Sister Marie-Joseph Dempsey, a William J. Mayo operating nurse in Rochester, Minn. (1) . Late onset in the course of the disease, it is associated with a poor prognosis. In a third of cases, it represents the first manifestation of the cancerous disease (2, 3).

We report a case of an umbilical skin metastasis revealing an adenocarcinoma excreto-biliary in a patient admitted to the gastroenterology department of the military hospital of Nouakchott.

Observation

A 68-year-old patient who consulted in the gastrological emergency department for a Painful umbilical skin lesion appeared one month before his consultation. HAS The interrogation she does not present any particular pathological antecedent she indicates anotion of epigastralgia associated with nausea

and anorexia evolving for 2 months without weight loss concept. On clinical examination, a stable conscious patient is observed on the hemodynamic and respiratory level PS at 2, icteric, abdominal examination demonstrates an umbilical swelling 2 cm in diameter, firm, painful, erythematous and slightly oozing. In front of this table a blood test was done objectifying hepatic cytolysis, total bilirubin at 50mg/l predominantly conjugated, CA19-9 and high ACE an abdominal CT scan was performed showing liver mass metastatic secondary with nodules of peritoneal carcinomatosis. She has benefited from a FOGD which objectified an erythematous pangastritis. A biopsy of the umbilical nodule was performed and the Histological and immunohistochemical aspect was in favor of an adenocarcinomatous process of excreto-biliary origin. The patient has been proposed for palliative chemotherapy.



Figure 1: image of the umbilical nodule of our patient

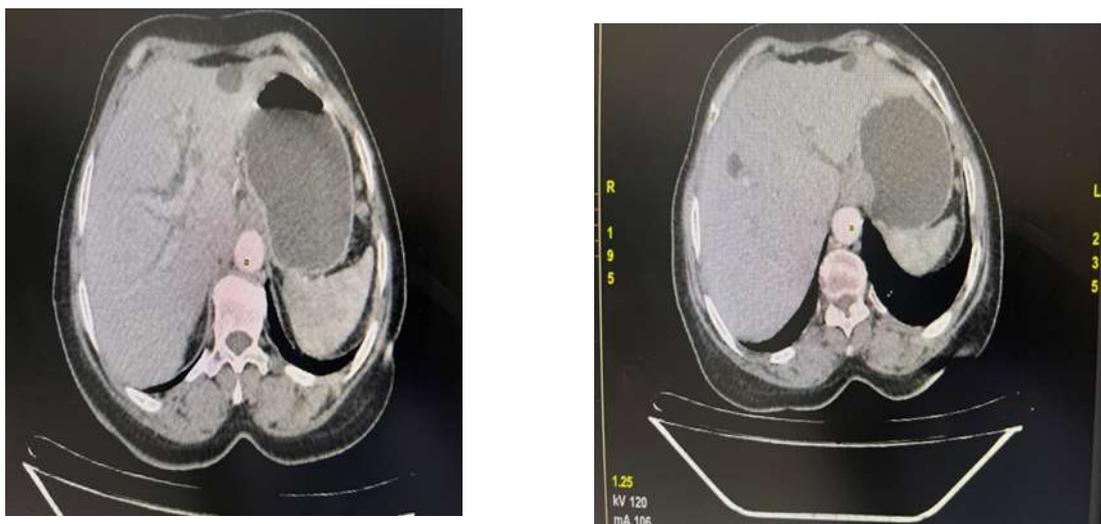


Figure 2: Abdominal scan of the patient

Discussion

The nodule of SMJ is a nodule of the umbilicus most often secondary to a metastasis abdominopelvic cancer (4), squamous cell carcinoma, melanoma or sarcoma are found more rarely (10%). It is the sister and nurse Marie-Joseph who in 1928, at the Mayo Clinic in Minnesota, discovered the association between this nodule and a carcinoma of the stomach and gave him his name. It is first described by Sir Hamilton Bailey in 1949 in his book "Physical signs in clinical surgery" (3,4).

Epidemiologically, umbilical metastases are rare. They represent 3 to 4% of all secondary tumor locations and 10% of all lesions cutaneous secondary (5,6). Primary lesions should be sought first and foremost stomach (25%), ovary (12%), colon (10%) or pancreas (7%). Endometrium, cervix, bile ducts and small intestine are more rare (3). In a third of cases, the origin of the primary cancer is not identified. The pathophysiology of Sister Marie-Joseph's nodule is still incompletely elucidated.

Indeed, there are four possible ways of dissemination of neoplastic cells towards the umbilicus which are: hematogenous dissemination, extension from the round ligament liver to the middle umbilical ligament of the urachus, lymphatic reflux retrograde and adjacent spread from the anterior surface of the peritoneum via the dermal vessels of the umbilicus, which explains the appearance of the nodule of Sister Marie-Joseph in the advanced stages of deep cancers often accompanied by peritoneal carcinomatosis. A few iatrogenic cases following laparoscopy have been reported in patients who probably have occult intra-abdominal tumors (1,8,9).

The average age of onset of these metastases is 60 years with no difference in distribution by sex(7). The age of our patient agrees with the data in the literature with an age of 68 years old.

This nodule is in the form of a rounded, irregular, indurated swelling, often painful and oozing, sometimes itchy. It may take different colors: white, purple, red, brown. It usually measures between 5 and 20 mm in length. diameter, but can reach up to 10 cm. Sometimes ulcerated, fissured or necrotic, its evolution is sometimes characterized by discharge of blood, pus or serous fluid (2,3). Imaging is insufficient to distinguish these lesions from benign or malignant others. Biopsy, often easy to perform without or with ultrasound guidance, is then the investigation of choice to support the diagnosis.

The differential diagnosis of an umbilical nodule includes benign conditions like botryomycoma, omphalitis, hernias and umbilical locations of the disease Crohn's disease or endometriosis (1,2).

With an average life expectancy of ten to eleven months, the prognosis after the installation of the diagnosis of NSMJ is unfavorable (10). A radical surgical procedure with adjuvant chemotherapy is associated with a better prognosis with a longer life expectancy compared to surgery or chemotherapy alone (11).

Conclusion

The SMJ nodule is a metastasis of a cancer most often of digestive origin. He often represents the only sign of an underlying oncological disease. The prognosis is dark requiring systematic screening.

Conflict of interest

Absence of conflict of interest

Contribution of authors and agreements

I confirm that all authors of the manuscript have read and agree to its contents and that the reproducible material described in the manuscript would be freely available to all scientists wishing to use it for non-commercial purposes.

References

1. Touré PS, Tall CT, Dioussé P, Berthé A, Diop MM, Sarr MM, et al. Nodule of Sister Marie-Josèphe revealing digestive and ovarian carcinoma: about 4 cases. *Pan Afr Med J.* 2015; 22:269.
2. El khadir A., Hliwa W, Alaoui R. Umbilical cutaneous metastasis (or Sister Marie-Joseph's nodule) revealing a small bowel adenocarcinoma - About a case. *HEGEL - Liberal HEpato-GastroEnterology.* 2013; (4): 264.
3. Palaniappan M, Jose WM, Mehta A, Kumar K, Pavithran K. (Umbilical metastasis: a case series of four Sister Joseph nodules from four different visceral malignancies. *Curr Oncol.* 2010; 17(6): 78-81.
4. Gabriele R, Conte M, Egidi F, Borghese M. Umbilical metastases: current point of view. *World J Surg Oncol.* 2005 Feb 21; 3 (1):13. [Free PMC article] [PubMed] [Google Scholar]

5. Turquin T, Cowpli B.P, Kouame J, Kouadio K, Echimane A. Umbilical metastasis of visceral tumors: About two cases. *Black African Medicine* 1996;43:10.
6. Hermas S, Mahdaoui S, Noun M, Samouh N. Nodule of Soeur-Marie-Joseph: About a case. *Elsevier Masson. Imagery of Women* 2011;21:83-85.
7. Al-Mashat F, Sibiany AM. Sister Mary Joseph's nodule of the umbilicus: is it always of gastric origin? A review of eight cases at different sites of origin. *Indian J Cancer*. 2010 JanMar;47(1):65-9.
- 8.S.
8. Gharaba • K. Elfadil • Z. Samlani • A. Difaa .Sister-Marie-Joseph's nodule: what diagnostic and therapeutic implications? About two cases. *J. Afr. Hepatol. Gastroenterol.* DOI 10.1007/s12157-011-0321-z 9.
9. Touard JP, Lentz N, Dutronc Y, et al (2000) Umbilical skin metastasis revealing ovarian adenocarcinoma. *Gyneco Obstetrics* 28(10):719–21.
10. Powell FC, Cooper AJ, Massa MC, Goellner JR, Su WP. Sister Mary Joseph's nodule: a clinical and histologic study. *J Am Acad Dermatol*. 1984;10(4):610–5.
11. Renner R, Sticherling M. Sister Mary Joseph's nodule as a metastasis of gallbladder carcinoma. *Int J Dermatol*. 2007;46(5):505–7.