Umbilical Metastasis Secondary to Ovarian Carcinoma - A Rare Case of Sister Mary Joseph Nodule

Pottala Mounika[1], Deepit Sandeep Shrivastava[2], Deepika Diwani[3]

[1, 2, 3] Department of Obstetrics & Gynaecology, Datta Meghe, Institute of Medical Sciences, Sawangi, Wardha, Maharashtra.

PRESENTATION OF CASE

A palpable umbilical nodule with bulging is a result of abdominal or pelvic malignancy. Usually advanced stage of disease indicated by multiple peritoneal metastasis associated with umbilical nodule has a poor prognosis. Most of the cases are metastatic adenocarcinoma malignancies. Palpable umbilical nodule with evidence of metastasis is also named as Sister Mary Joseph Nodule (SMJN). This was named after Dr. William J Mayo's surgical assistant Sister Mary Joseph, who acknowledged the correlation between the involvement of umbilical nodule and intra-abdomino-pelvic malignancy,[1] has a prevalence of 1 % - 3 % in both intra-abdominal and pelvic malignancies.[2] Gastrointestinal tumours, mainly gastric, colon, pancreas, account for almost 52 %; gynaecological malignancies, mainly ovarian and uterine, account for almost 28 % of undetected tumours. Fifteen to 29 per cent of all cases are of uncertain cause.

A 26-year-old unmarried female came with the complaints of fullness of abdomen and distension of abdomen. Difficulty in micturition since 1 month. And also, c / o swelling over the umbilical region which bleeds on touch since 30 days. She had past history of papillary cyst adeno carcinoma of ovary and received 6 cycles of chemotherapy with paclitaxel and carboplatin 1 year back. After the last chemo cycle patient underwent total abdominal hysterectomy with omentectomy due to no reduction in tumour size and extension into bowel. After 8 months of her surgery patient came with complaints of decreased appetite, nausea and vomiting. And also, irregular bowel habits since 20 days, on physical examination tense ascites present. Umbilical stump of 2 x 3 cm size present which bleeds on touch; with suspicion of metastasis we performed blood tests and tumour markers revealed CA125 of 69 i.u / l. Tumour board discussion was done, advised post op CECT (Contrast-Enhanced Computed Tomography) and upper GI endoscopy and X-ray chest to rule out metastasis. X-ray chest s / o bilateral pleural effusion with upper GI endoscopy upper esophagitis reported. CECT s / o Krukenberg tumour. Tumour board advised FOLFOX regimen 3 cycles. Pt has received 3 cycles of chemotherapy. Her CA-125 currently 27 i.u. / l. Her CA-125 levels have been showing progressively decreasing trend.

Corresponding Author:
Dr. Pottala Mounika.
Department of Obstetrics & Gynaecology,
Shalinathai Girls Hostel, Sawangi,
Waradha, Maharashtra.
E-mail: mounika.pottala14@gmail.com

DOI: 10.14260/jemds/2020/734

How to Cite This Article:
Mounika P, Shrivastava DS, Diwani D. Umbilical metastasis secondary to ovarian carcinoma - a rare case of sister Mary Joseph nodule. J Evolution Med Dent Sci 2020;9(44):3343-3344, DOI: 10.14260/jemds/2020/734

Submission 09-07-2020,
Peer Review 20-09-2020,
Acceptance 25-09-2020,
Published 02-11-2020.

Copyright © 2020 Pottala Mounika et al. This is an open access article distributed under Creative Commons Attribution License [Attribution 4.0 International (CC BY 4.0)]

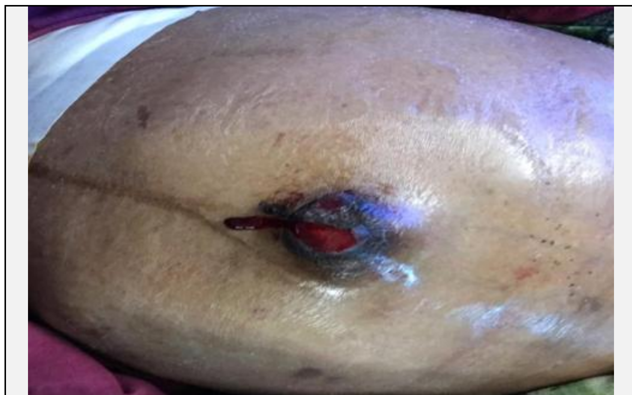
Figure 1. Umbilical Nodule (2 x 3 cm) with Tense Ascites

DISCUSSION

Umbilical nodules not always represent malignant tumours sometimes they can be present in benign lesions such as endometriosis, fibroma, keloid, myxoma, epithelial inclusion cysts or granuloma of foreign body.[3,4] In malignancy cases common most site of primary origin is in abdomino-pelvic tumour. Epithelial ovarian tumours are the most prevalent primary sites of gynaecological malignancies.[2] Whereas in men the gastrointestinal tract of which the stomach is the most popular single location. The primary site may never be found in about 11 % cases of Sister Mary Joseph's Nodule. Primary malignant tumour of umbilicus is a rare entity like basal cell carcinoma, sarcoma, and melanoma. Sister Mary Joseph nodule presentation can be quite variable, it can present as irregular nodular mass to hard or soft and ulcerated painful mass. Physical examination may mislead us because of the overlying skin of the lesion can be erythematous or normal. In general 60 % of the umbilical tumors are benign. In this case patient has presented with GIT symptoms along with umbilical nodule which is erythematous, bleeds on touch and tense ascites. We have examined her to rule out metastasis because she is an operated case of total abdominal hysterectomy with bilateral salpingo-oophorectomy with infracolic omentectomy k / c / o papillary serous cystadenocarcinoma of ovary. After that she received 6 cycles of chemotherapy. We performed CECT scan which suggestive of Krukenberg tumour, and also, we have sent ascetic fluid for cytological confirmation which has revealed malignant nature of fluid. The SMJN represents 1 - 3 % of the secondary locations of the gastrointestinal malignancies.[5] Gynaecological mainly ovary and endometrium malignancies represents 28 %, and from gastro intestinal adeno carcinomas 52 % represents SMJN tumors.[6] A more frequent finding and almost always indicative of advanced sister Mary Joseph nodule disease includes a metastatic lesion from ovarian carcinoma. Papillary cystadenocarcinoma of ovary is clinically aggressive and have a high metastatic potential[7] for patients already treated with surgery and chemotherapy. Umbilic metastasis in ovarian malignancy can occur during follow-up visits. Tsai et al. reported two cases of the nodules of Sister Mary Joseph accidentally noted three and eight years after initial management, with no other signs of recurrence either from imaging studies or from CA-125 levels.[7]

CONCLUSIONS

Disseminated malignancy is unusual and often Sister Mary Joseph Nodule indicates poor prognosis, allowing a timely primary lesion detection. Sister Mary Joseph Nodule should be considered as a differential diagnosis in umbilical nodule.

Financial or other competing interests: None.
Disclosure forms provided by the authors are available with the full text of this article at jemds.com.

REFERENCES

[1] Bailey H. Demonstrations of physical signs in clinical surgery. 11th edn. Baltimore: Williams & Wilkins 1949: p. 227.
[2] Chaffins ML, Altman DA, Balle MR, et al. Metastatic umbilical carcinoma- the Sister Joseph's nodule. Cutis 1993;52(1):37-9.
[3] Galvan VG. Sister Mary Joseph's nodule. Ann Intern Med 1998;128(5):410.
[4] Gabriele R, Conte M, Egidi F, et al. Umbilical metastases: current viewpoint. World J Surg Oncol 2005;3(1):13.
[5] Nolan C, Semer D. Endometrial cancer diagnosed by Sister Mary Joseph nodule biopsy: case report. Gynecol Oncol Case Rep 2012;2(3):110-1.
[6] Sharma A, Sharma V. Image diagnosis: Sister Mary Joseph nodule. Perm J 2014;18(2):e132.
[7] Wronski M, Klucinski A, Krasnodebski IW. Sister Mary Joseph nodule: a tip of an iceberg. J Ultrasound Med 2014;33(3):531-4.