



A Rare Presentation of Cervical Cancer With Umbilical Nodule: A Case Report

KEYWORDS

Carcinoma cervix, umbilical nodule, squamous cell carcinoma

Dr. Kannan P

Senior Resident, Department of Radiotherapy, JIPMER, Puducherry, India

Dr. Gunaseelan K

Associate Professor, Department of Radiotherapy, JIPMER, Puducherry, India

Dr. Srinivas BH

Assistant Professor, Department of Pathology, JIPMER, Puducherry, India

Dr. Vivekanandam S

Professor and Head, Department of Radiotherapy, JIPMER, Puducherry, India

ABSTRACT Sister Mary Joseph nodule is very uncommon and it is rare as a first sign of internal malignancy. The most common origin of this umbilical nodule is gastrointestinal followed by gynaecologic cancers. Ovarian cancers are the most frequent cause among gynaecological malignancies. Sister Mary Joseph nodule from cervical cancer is rare and further, umbilical nodules are generally adenocarcinomas. Primary squamous cell carcinoma of cervix metastasising to the umbilicus is extremely rare and only few cases have been reported in the literature.

CASE SUMMARY:

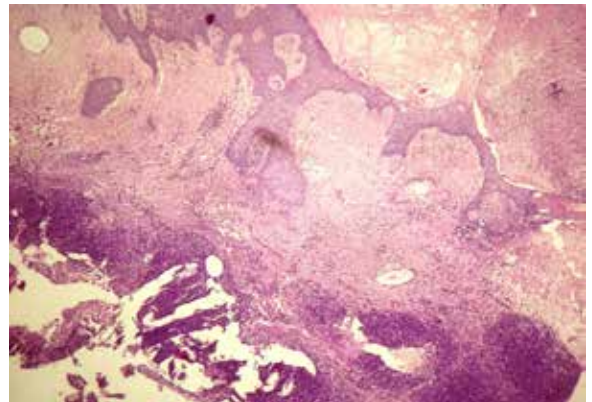
A 78 year old postmenopausal female presented to our outpatient facility with complaints of mass in the umbilicus for 3 months duration and discharge from the mass for 2 months. General physical examination was normal. Local examination revealed a 3x3 mass in the umbilical region. The surface of the mass was ulcerated and there was serous discharge oozing from the mass [figure 1].

Figure 1: Sister Mary Joseph nodule



There was no other abnormality detected in the rest of the abdomen. Upper gastrointestinal endoscopy was normal. Gynaecologic examination revealed a 5x5 cm ulceroproliferative growth replacing cervix with involvement of all fornices and posterior vaginal wall was involved in the upper two thirds. Right side parametrium was involved upto pelvic side wall and left parametrium was medially involved. **Investigative reports:** Biopsy from the umbilical nodule was suggestive of squamous cell carcinoma [figure 2].

Figure 2: Metastatic deposits of squamous cell carcinoma documented by biopsy



Biopsy report from the cervix was squamous cell carcinoma-non keratinising. Ultrasound abdomen revealed 2.3 x 1.8cm hypo-echoic lesion underlying umbilicus, multiple para-aortic nodes largest 2.5cm and multiple well defined hypoechoic solid mass lesions in right lobe of liver largest measuring 3.7x1.8cm suggestive of metastasis. Chest X-ray revealed lung metastases [figure 3].

Figure 3: CXR showing pulmonary metastases



The patient was diagnosed as a case of squamous cell carcinoma of cervix with metastasis to umbilicus, lungs and liver. The patient was staged as FIGO IVB and treated with palliative external beam radiation [30Gy/10fractions] to the umbilicus and pelvis. After radiotherapy, there was complete disappearance of the nodule in the region of umbilicus [figure 4].

Figure 4: Disappearance of Sister Mary Joseph nodule after radiotherapy



Since the patient was very elderly and not fit for chemotherapy, she was put on best supportive care after RT.

DISCUSSION:

The presentation with umbilical nodule as a first sign of malignancy is rare¹. Umbilical metastasis is also known as Sister Mary Joseph nodule. It is named after the sister who observed this umbilical nodule in a patient with gastric cancer. Sister Mary Joseph was a surgical assistant to Dr. William James Mayo. In 1949, Sir Hamilton Bailey first used the term 'Sister Mary Joseph's nodule' to describe metastatic umbilical lesions².

The most common symptoms of patients with cervical cancer include bleeding per vaginum and white discharge per vaginum. Some patients may also present with urinary symptoms, bowel symptoms and low back ache. It is very rare for a cervical cancer patient to present with umbilical nodule. The most common cause of umbilical nodule is gastrointestinal cancer. Umbilical metastasis has also been reported in patients with primary gynaecologic malignancies of which the ovarian malignancies are the most frequent cause. Umbilical metastasis from cervical cancer is rare and umbilical metastases are generally adenocarcinomas³. Primary squamous cell carcinoma of cervix metastasising to the umbilicus is extremely rare and only few cases have been reported in the literature^{4,5}.

In a clinical study of 15 cases of umbilical metastases from gynaecologic malignancies by Yao et al.⁶, 11 cases were ovarian and only 2 cases were cervical cancer and these 2 cases were diagnosed with umbilical metastasis after treatment for cervical cancer. Umbilical metastases lead to the diagnosis of previously occult neoplasms in 14-33% of cases⁷. In our report also, umbilical nodule lead to the diagnosis of cervical cancer.

The exact pathway of spread to the umbilicus is clearly not known. The probable ways of spread include direct extension along the falciform ligament or urachus, lymphatic, arterial or venous embolization, direct spread from the intraperitoneal metastasis to the umbilicus through the abdominal wall.

The presence of a histologically confirmed Sister Mary Joseph nodule signifies metastatic malignancy and a poor prognosis⁸. The best treatment for patients with umbilical metastasis is not known because of rarity of these tumors. In our case, the lesion was treated with external beam irradiation to a dose of 30 Gy in ten fractions which showed complete disappearance of the tumour after radiotherapy.

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