

Colonic mucinous adenocarcinoma in a pregnant woman presented as pseudo Sister Mary Joseph's nodule: A case report

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SUMMARY

We report a case of a 41-year-old pregnant woman who initially presented with a sub-umbilical lump, for nearly five months. Subsequently, an ultrasound study was performed, and the patient underwent a surgical drainage operation for a presumed inflammatory condition, at the periumbilical region. The patient returned after a week post-drainage with a faecal discharging fistula. One month later, the patient had an emergency lower caesarean section plus bilateral tubal ligation because of the transverse lie of the foetus. One-month post-operative caesarean section, the fistula opening showed a big protruding ulcerating mass. En-bloc resection of the transverse and the descending colon was performed, and the histopathologic diagnosis showed a moderately differentiated mucinous adenocarcinoma. This case highlights that a high index of suspicion was recommended in an unresolved periumbilical lump (pseudo Sister Mary Joseph's nodule), and periumbilical metastasis of colorectal cancer frequently indicates advanced disease and poor prognosis. In view of its rarity of occurrence and limited experience, in the management of an ambiguous case, we report this case.

INTRODUCTION

Umbilical metastasis (Sister Mary Joseph's nodule) is an important physical finding. Cutaneous metastasis may occur through a direct extension of the tumour or lymphatic spread, intravascular dissemination, and surgical implantation.¹ Furthermore, there can be spread along the embryonal remnants such as the urachus in addition to the aforementioned mechanisms. We report a case of a 41-year-old pregnant woman who initially presented with a sub-umbilical lump, for nearly five months and was only later diagnosed to have metastatic disease. This case reveals the need for that a high index of suspicion when faced with an unresolving periumbilical lump (pseudo Sister Mary Joseph's nodule). Periumbilical metastasis of colorectal cancer frequently indicates advanced disease and poor prognosis. In view of its rarity of occurrence and limited experience in the management of an ambiguous case, we report this case.

CASE REPORT

A 41-year-old female, Gravida 6, Para 5, at 6 months of pregnancy, presented with a sub-umbilical enterocutaneous faecal fistula. Patient revealed that she complained of swelling near the umbilical region for nearly five months with recurrent vague abdominal pain, with an altered bowel habit, losing about 11 kg of body weight.

She also mentioned that late in March 2016, based on the report of an ultrasound study done at that time, she had undergone a surgical drainage operation for a presumed inflammatory condition near the umbilicus region. The patient returned after a week post-operatively with a sub-umbilical faecal discharging fistula. Then, patient was transferred to the general surgical department, Hospital Selayang.

Physical examination revealed that the patient was 7 months pregnant, with a viable baby and with sub-umbilical enterocutaneous faecal fistula; otherwise, the physical examination was unremarkable.

Full general laboratory tests were done. Apart from mild anaemia, all other results were unremarkable.

The enterocutaneous faecal fistula (ECF) was managed by using a colostomy bag for one month to give chance for the pregnancy to proceed further and to save the viable foetus. A month after the LCS, the ECF opening showed a large protruding ulcerating mass (Figure 1).

On the 18th of May 2016, the patient had an emergency lower caesarean section (LCS), with a bilateral tubal ligation due to the transverse position of the foetus.

On the 25th of June 2016, a computed tomography scan (CT scan) of the abdomen and pelvis was performed, which confirmed the presence of a large mass in the upper-central abdomen measuring approximately 15.5 × 10.5 × 11.5 cm (height × TR × AP).

The mass protruded through the anterior abdominal wall at approximately the level of the umbilicus, infiltrating and extending through the anterior abdominal musculature and

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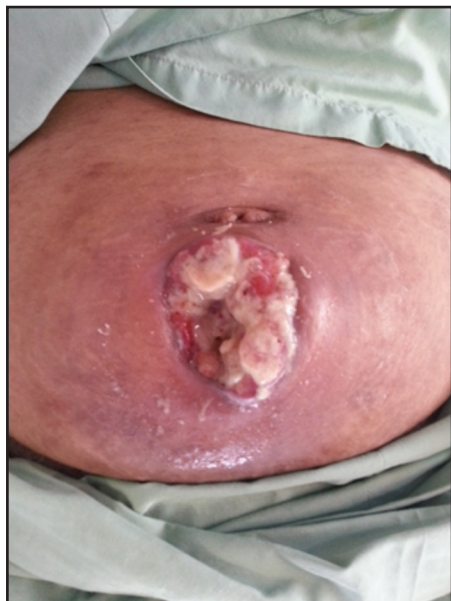


Fig. 1: Sub-umbilical enterocutaneous faecal fistula opening with a large protruding ulcerating mass.

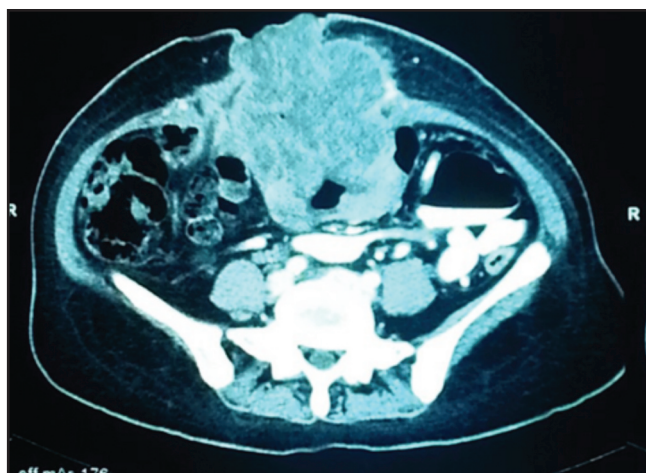


Fig. 2: Computed Tomography scan of the sub-umbilical region showed a large mass in the upper-central abdomen. The mass protruded through the anterior abdominal wall at approximately the level of the umbilicus.

extending to the skin as an ulcerated mass. There were lucencies of air within the mass, which may well have an irregular lumen (Figure 2).

The diagnoses were discussed with the patient and her family, and the patient consent was obtained for the proposed extensive surgical operation.

On the 25th of July 2016, the definitive surgery was done through a transverse elliptical incision, including the umbilicus with the fungating mass, cutting through the rectus sheath and muscles around the large infra-umbilical ECF and the tumour, which was found to be connected to the mid-transverse colon, also descending colon adhered and involved with the tumour mass, rectus muscles, and sheaths. En-bloc resection of the transverse and the descending colon was done, colonoscopy for the distal part of colon on table was done, no synchronous lesion was found, and left and right ureters were identified and preserved. A side-to-side anastomosis was performed with a GIA-100 stapler, between the ascending colon and sigmoid colon.

The left tensor fascia lata muscle was harvested and transplanted as an autologous graft. This procedure was performed to repair the defect in the remaining rectus abdominis sheath.

Histopathologic examination of the surgical specimen proved it as mucinous adenocarcinoma, moderately differentiated, and the tumour had directly invaded the abdominal wall.

DISCUSSION

In this case, the direct extension is the most probable way of spread, and the pregnancy with enlargement of the gravid

uterus has the main impact to let the direct spread take place. Metastatic carcinoma can assume a variety of morphologic appearances. It usually presents as violaceous to a flesh-coloured, firm, freely mobile, painless nodules, single or multiple. It can sometimes mimic epidermal cysts, neurofibromas, lipomas, cicatricial morphea-like plaques, lymphoma, and alopecia. More rarely, it can mimic infection and present as a zone of pink to deep red or purplish-red indurated erythema with a well-demarcated border, a condition termed inflammatory metastatic carcinoma or carcinoma erysipelatoides.^{2,3}

The presence of a skin lesion in the majority of cases indicates cutaneous metastases. However, further investigations are essential in order to rule out the possibility of a metachronous tumour, which can occur from 4 up to 30 years following an original resection. Therefore, the first line investigation should be the biopsy of a skin lesion followed by the full body CT to assess for the metastases elsewhere.^{4,5}

CONCLUSION

Umbilical metastasis (Sister Mary Joseph's nodule) is an essential diagnosis to be identified. This case clearly highlights a rare but important physical finding as it is a sign of advanced stage of malignancy. A misdiagnosis in the initial stage of presentation of bacterial skin infection had been made without any evidence based on tissue cultures or biopsy. Therefore, any unexplained swelling, mass, or persistent cellulitis that does not respond to a short course of antibiotics therapy, should be seen by an experienced specialist and to be further investigated. The patient who had refused the initial suggestion for biopsy or surgical management, should have been counselled regarding the sinister possibilities of a non-healing lesion.

A few extremely vital key lessons to take from this case are as follows:

1. In cases like this, the patient must be directly referred to a specialist capable of performing proper radiological diagnostic procedures, as an early (accurate) diagnosis would have prevented these major complications.
2. Skin metastasis is an uncommon but significant occurrence that should not be overlooked since it often implies advanced pathology and a poor prognosis. Subsequent assessment should be carried out when any changes in the skin are noticed.

CONFLICT OF INTEREST

The authors state that there is no conflict of interest to declare.

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