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SISTER MARY JOSEPH'S NODULE AS A METASTATIC PRESENTATION IN BREAST CARCINOMA.

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Introduction

Sister Mary Joseph's nodule (SMJN) is used to describe an umbilical nodule which is due to metastatic cancer, often due to gastrointestinal and gynecological malignancies (1,2). Approximately 15-29% cases of SMJN have an unknown origin (3). SMJN presents as a firm, indurated swelling over the umbilicus and may even sometimes be ulcerated or have associated discharge. Recurrent breast cancer presenting with SMJN is an exceedingly rare presentation (4).

Case Presentation

We reported a case of a 69-year-old lady who was treated for left early breast carcinoma 15 years ago, presented with abdominal discomfort and umbilical swelling for 2 weeks of duration. On examination, an umbilical firm nodule which was suggestive of SMJN was visible. A CT abdomen was performed which suggested small bowel obstruction. She underwent an exploratory laparotomy which showed diffuse malignant peritoneal dissemination with a large peritoneal deposit at the terminal ileum causing small bowel obstruction. Resection of the umbilicus and a diverting loop ileostomy was performed. The histopathology of the umbilicus confirmed metastatic carcinoma, where the immunohistochemistry staining was strongly positive for GATA3, CK7, ER, and PR and weakly positive for GCDFP15, favoring breast as the primary origin.

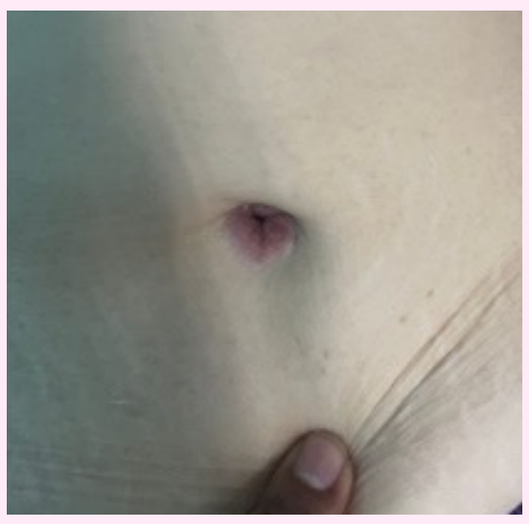


Fig 1: clinical finding of Sister Mary Joseph's nodule

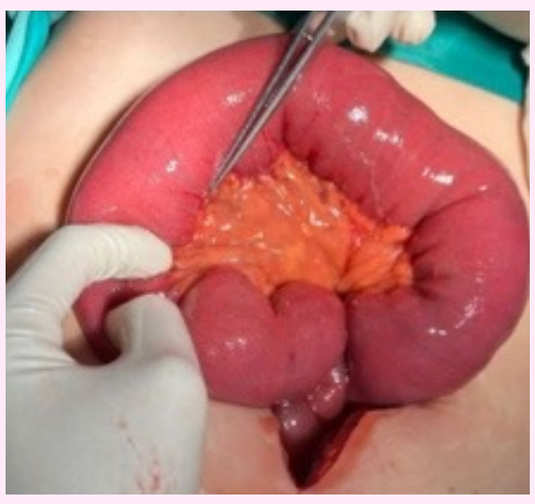


Fig 2: Intra-operative omental nodule

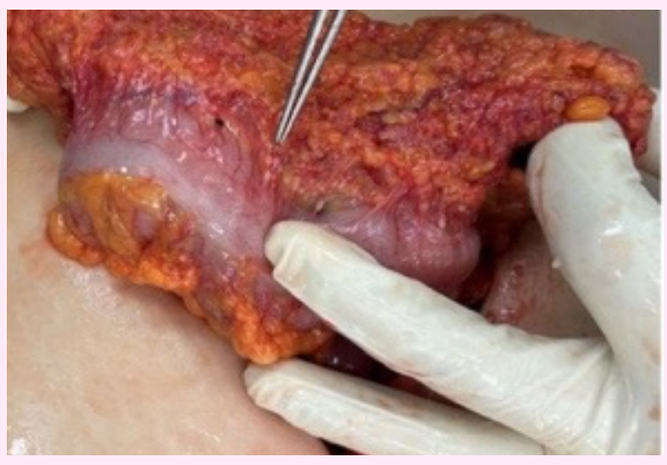
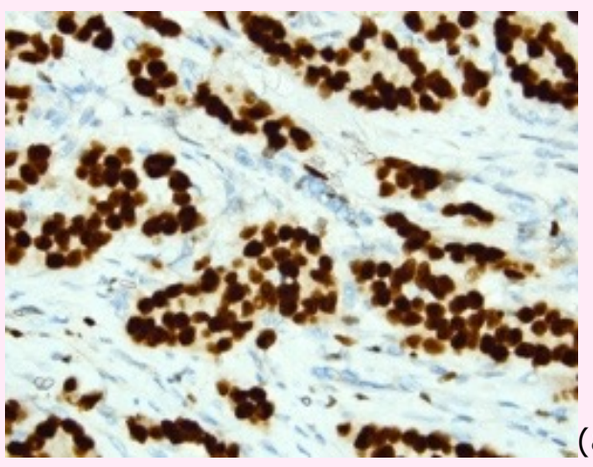
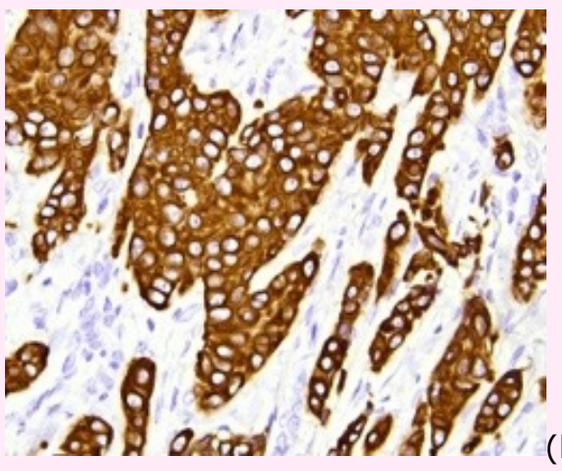


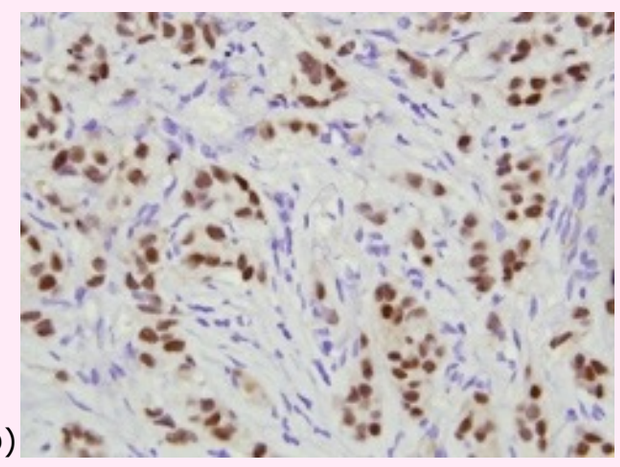
Fig 3: Another intra-operative omental nodule



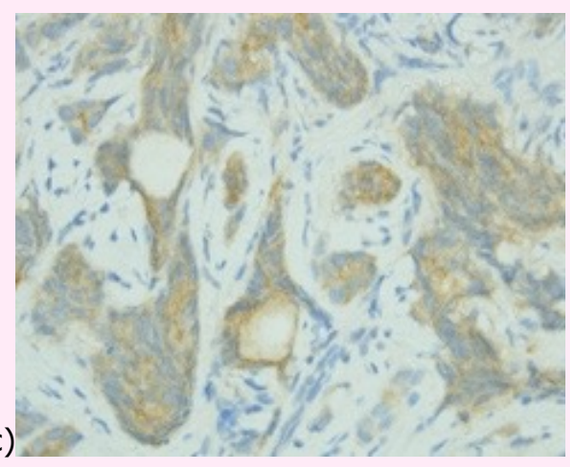
(a)



(b)



(c)



(d)

Fig 4: Different immunohistochemistry staining used for confirmation of diagnosis. (a) GATA3 (b) CK7 (c) ER (d) GCDFP15

Discussion

It is postulated that SMJN develops from tumor seeding via transperitoneal, hematogenous, lymphatic, along falciform or umbilical ligaments. Breast cancer primarily metastasize to the lymph nodes, bones, lungs, liver, and brain rather than directly into the peritoneal cavity. Such a case poses diagnostic challenges and imaging modality like CT scan may aid in looking for any occult metastasis. Often, the presence of SMJN portrays a poor prognosis with an average survival time of 10months or less after diagnosis made (3,5). Immunohistochemistry staining is crucial in determining the origin of SMJN.

Conclusion

SMJN arising from breast cancer is exceptionally rare (4). Maintaining a high index of suspicion and exercising sound clinical judgment is essential in avoiding the oversight of such a diagnosis.

References

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