

CLINICAL IMAGING

Sister Mary Joseph's nodule in a patient with metastatic small cell lung cancer

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We present a case of 56-year-old male with small cell carcinoma of the lung with metastatic tumor nodule of the umbilicus. To our knowledge, this is only the second reported case of small cell lung cancer associated with Sister Mary Joseph's nodule.

Keywords: *Sister Mary Joseph's nodule; lung cancer; small cell carcinoma*

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A 56-year-old Caucasian male with an unremarkable past medical history presented with several weeks history of worsening back and left chest wall pain, constipation, and a 15-pound weight loss in 1 month. Patient had a 50 pack-year history of smoking. The physical examination was unremarkable except for the presence of a tender 2-cm subcutaneous nodule in the periumbilical area (Fig. 1a). Further evaluation with computed tomography (CT) showed a suspicious lung malignancy with metastasis to the spine, liver, left adrenal gland, and retroperitoneum. A CT-guided biopsy of the liver lesion confirmed small cell lung cancer. CT of the abdomen confirmed the periumbilical lesion consistent with Sister Mary Joseph's nodule (SMJN) (Fig. 1b). After extensive discussion about the treatment options, the patient opted for hospice care.

SMJN is a metastatic tumor nodule of the umbilicus usually as a result of contiguous extension from the anterior peritoneal surface. It was named after Sister Mary Joseph who assisted Dr. Mayo during the 1890s and noted umbilical lesions among patients with intra-abdominal malignancies (1). The most common primary tumors associated with SMJN arise from stomach and colon in males and ovary and endometrium in females (2). Primary tumors of lungs have been rarely associated with SMJN out of which most cases have been adenocarcinomas of the lung (2–4). To our knowledge, this is only the second reported case of small cell lung cancer associated with SMJN. As in prior reported cases, extensive abdominal and mesenteric metastasis possibly led to a contiguous

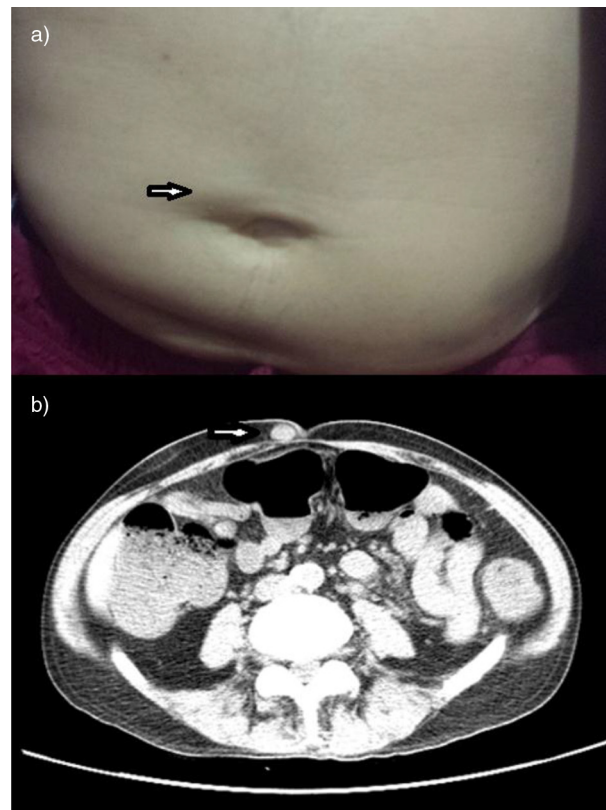


Fig. 1. (a) Sister Mary Joseph's nodule visible as a nodule near the umbilicus, (b) computed tomography of the abdomen at the level of umbilicus showing the Sister Mary Joseph's nodule.

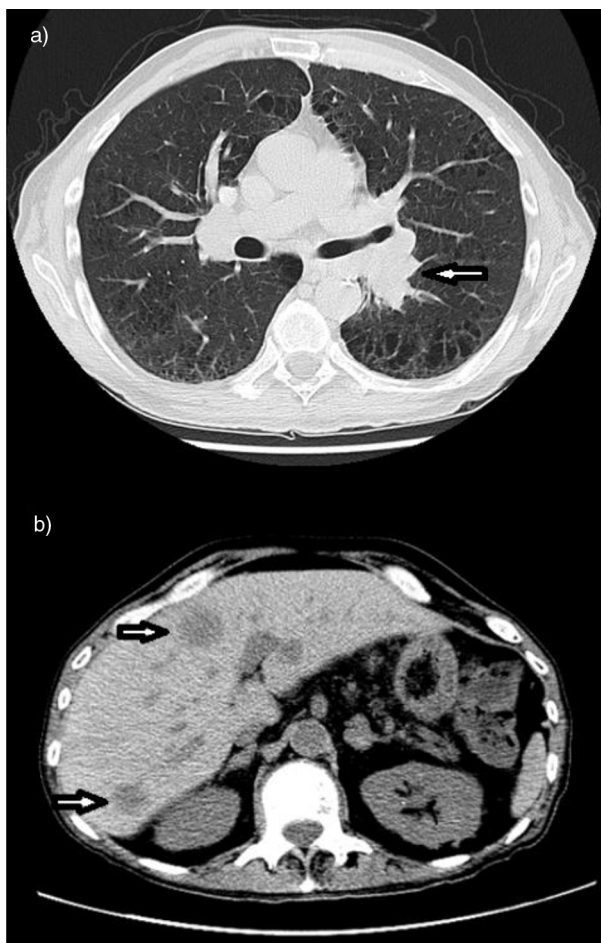


Fig. 2. (a) Computed tomography of the chest with contrast showing speculated lung mass (arrow), (b) computed tomography of the abdomen with contrast showing multiple metastatic lesions in the liver.

spread of the malignancy to SMJN in our patient (2–4) (Fig. 2).

Authors' Contribution

SG, RP, and SG gathered clinical data and wrote the manuscript; MGM supervised the project and edited the manuscript.

Competing interests and funding

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