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Sister Mary Joseph's Node

To the Editor:

An 85-year-old woman was admitted with vomiting and loss of appetite. Clinical examination revealed the presence of multiple nodular lesions in and around the umbilicus (Figures 1 and 2). She also had a mildly enlarged liver, which was firm and nodular. On further evaluation she was found to have mild renal failure (serum creatinine: 2.5 mg/dL; normal range: 0.5-1.2 mg/dL). Alkaline phosphatase also was mildly elevated (215 U/L; normal range: 38-126 U/L). Ultrasound study of the abdomen revealed the presence of ascites, with an enlarged liver with enhanced echoes and minimal intrahepatic biliary radical dilatation. CA 125 levels were elevated in both blood and ascites. Fine-needle aspiration cytology of the umbilical nodule was reported as papillary adenocarcinoma; however, the primary could not be identified. A contrast-enhanced computed tomography scan of the abdomen was deferred due to the renal failure. Besides, considering her age and advanced stage of malignancy, the family opted for palliative care.

Figure 1 Sister Mary Joseph's node.

Figure 2 Sister Mary Joseph's node (magnified).

The periumbilical lesions described above are suggestive of Sister Mary Joseph's node.

Sister Mary Joseph's node is due to umbilical metastasis.[1] This association was first noted by Sister Mary Joseph (1856-1939), who was the surgical assistant for Dr William J. Mayo at St. Mary's Hospital in Rochester, Minn.[2]

Malignant nodules of the umbilicus can be of primary origin (38%), secondary origin (30%), or due to endometriosis (32%). In the case of metastasis (secondary), 35%-65% may originate from the gastrointestinal tract, 12%-35% may be genitourinary, and 3%-6% may originate from other sources. In 15% to 30% of patients, the primary remains unknown.[3] Overall, metastasis to the umbilicus is uncommon and represents only 10% of all secondary tumors that have spread to the skin.[4,5]

The presence of Sister Mary Joseph's node usually implies an advanced stage of malignancy and carries a poor prognosis.[3] Rare though it may be, this time-tested sign highlights the importance of a thorough clinical examination, even in this era of modern medicine.

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References

1. Shetty MR. Metastatic tumors of the umbilicus: a review 1830-1989. *J Surg Oncol*. 1990;45(3):212-215.
2. Hill M, O'Leary JP. Vignettes in medical history. Sister Mary Joseph and her node. *Am Surg*. 1996;62:328-329.
3. Gabriele R, Conte M, Egidi F, Borghese M. Umbilical metastases: current viewpoint. *World J Surg Oncol*. 2005;3:13.
4. Lookingbill D, Spangler N, Sexton FM. Skin involvement as the presenting sign of internal carcinoma. A retrospective study of 7316 cancer patients. *J Am Acad Dermatol*. 1990;22:19-26.
5. Steck WD, Helwig EB. Tumors of the umbilicus. *Cancer*. 1965;18:907-915.