Image Quiz

Umbilical Nodule in Cholangiocarcinoma

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QUESTIONS

Q1. What is this sign known as [Figure 1]?

Q2. What are the conditions in which this sign is seen?



Figure 1: Umbilical nodule



The Saudi Journal of Gastroenterology

345

Volume 18, Number 5 Shawwal 1433 September 2012 Image Quiz

ANSWERS

- 1. This sign is known as Sister Mary Joseph Nodule. Historically, Sister Mary Joseph (1856–1939) was the nursing superintendent and surgical assistant of Dr. William Mayo at St Mary's Hospital in Rochester, Minnesota (at present, the Mayo Clinic), who noticed the presence of an umbilical nodule in intra-abdominal malignancies.^[1]
- 2. The most common sites of intra-abdominal malignancies associated with Sister Mary Joseph Nodule are the stomach and colon in males, and ovaries in females. Other reported primary sites are pancreas, biliary tract, fallopian tube, endometrium, and rarely from the lung and prostate.^[2]

Spread of metastatic carcinoma to the umbilical region has been hypothesized to occur by either contiguous spread of peritoneal cancer, hematogenous spread through arterial and venous systems or lymphatic spread (mainly pancreatic carcinoma), or extension along ligaments of embryonic origin (round ligament of liver, urachus, vitello intestinal duct remnant, and the obliterated vitelline artery).^[3] Our patient had extrahepatic cholangiocarcinoma, which was likely to have spread through falciform ligament to manifest as a metastatic umbilical nodule.

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346 Volume 18, Number 5 Shawwal 1433 September 2012

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