

## Sister Mary Joseph's Nodule: What Lies Beneath?

Dear Editor,

We recently had a 79-year-old male with no significant medical history who was referred to our hospital for a pulmonary embolism. During examination a 5 cm × 5 cm fungating mass was discovered on his belly [Figure 1]. Patient reported that the mass has been present for months and gradually increasing in size. A computed tomography scan of chest, abdomen and pelvis revealed no other abnormality. The biopsy of mass revealed moderately differentiated adenocarcinoma with stain consistent with tumor of lower gastrointestinal tract. A colonoscopy confirmed adenocarcinoma of transverse colon.

This rare manifestation of metastatic disease was recognized by a surgical assistant of Dr. William Mayo, Sister Mary Joseph, whose name has since been used to explain these umbilical nodules.<sup>[1]</sup> These metastatic lesions are mostly from gastrointestinal (52%) and gynecological neoplasms (28%), most commonly from the stomach (23%), colon (15%), pancreas (10%), and ovary (16%), and less frequently from the uterus, cervix, gallbladder, and small intestine.<sup>[2]</sup> Metastatic lesions can reach the umbilicus via spread through lymphatic ducts, the venous network, arterial spread, contiguous extension, or even through iatrogenic seeding with laparoscopy. These different pathways may help explain why there is such a wide group of malignant tumors that can produce these nodules.<sup>[3]</sup> The presence of these lesions is often a poor prognostic factor, as these patients have advanced metastatic disease at the time of initial diagnosis. In several studies, the average survival after the appearance of these nodules was approximately 10-11 months.<sup>[4]</sup> Sister Mary Joseph nodule is a rare first manifestation of colon cancer. Physicians should be aware of this unusual presentation of colon cancer.



**Figure 1:** A 5 cm × 5 cm fungating mass on patient's periumbilical area

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