

The Sister Mary Joseph Nodule, a Semiological Finding that Should not Be Forgotten. Case Report with Video

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Abstract

We present the case of a patient with upper gastrointestinal bleeding for whom the Sister Mary Joseph nodule was documented during the physical examination. Later, advanced gastric cancer was confirmed by means of digestive endoscopy and histopathological studies.

Keywords

Polyp, ball valve, intestinal obstruction, polypectomy.

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INTRODUCTION

The nodule, or sign, of Sister Mary Joseph is a malignant nodule in the periumbilical region which is associated with advanced abdominal neoplasia. (1) It was named in honor of Sister Mary Joseph of the congregation of Our Lady of Lourdes who worked as an assistant to Dr. William Mayo, the well-known surgeon. She frequently found this nodule while washing the abdominal wall of patients who were about to undergo surgery for abdominal tumors. (2) Its importance lies in the fact that it may be the only sign of presentation, progression or recurrence of a tumor. (3)

CLINICAL CASE

We present the case of a 48-year-old woman who came to the emergency department because of pain in the epigastrium, unexplained weight loss, hair loss and hematemesis.

Upon physical examination, she presented ascites and a three cm purple nodule with a necrotic center in the periumbilical region (Figure 1).

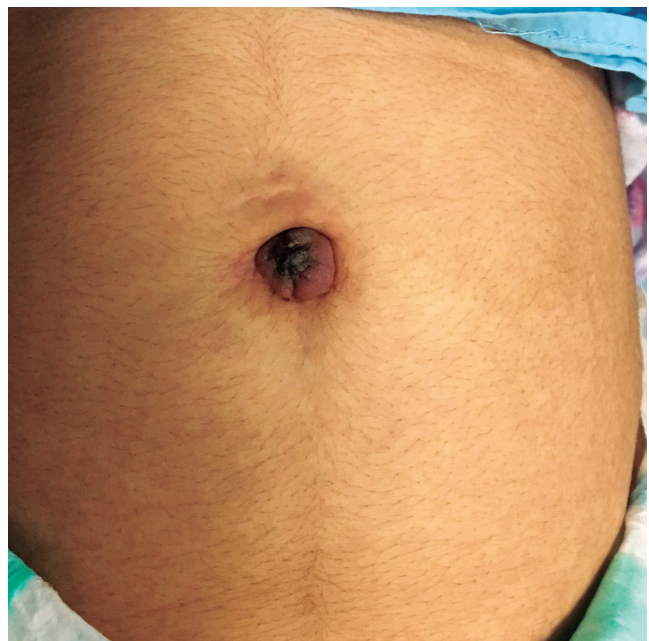


Figure 1. Sign of Sister Mary Joseph.

Among the paraclinical test results were findings of microcytic and hypochromic anemia. Kidney functioning, electrolytes and blood glucose were normal. The liver profile showed hypoalbuminemia with normal aminotransferases.

Upper digestive tract endoscopy found a spontaneously bleeding ulcerated tumor-like lesion with irregular edges that was approximately 45 mm in diameter. It was located towards the corporal antral junction, extended towards the posterior wall, and had multiple satellite polypoid lesions (Figure 2, Video 1).

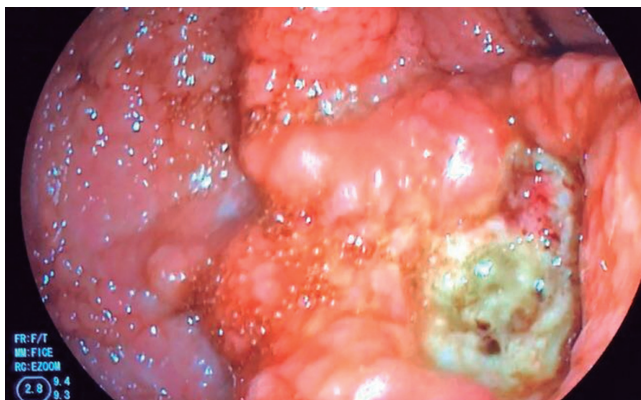


Figure 2. Gastric cancer



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Video 1. The video shows navel metastasis of a patient with advanced gastric cancer. A large, actively bleeding mass can be seen. <https://youtu.be/K9fyLHGhqL0>

A biopsy of the umbilical lesion indicated adenocarcinoma, and samples taken during endoscopy confirmed that it was a moderately differentiated gastric adenocarcinoma.

DISCUSSION

The sign or nodule of Sister Mary Joseph is a purplish nodule in the umbilicus with a necrotic center. (4) It is

related to metastatic lesions of malignant tumors of pelvic or abdominal origin. (5) Gastrointestinal neoplasms are the main cause, (6) but the mechanism by which cancer spreads to the periumbilical region is unknown. (7) The most widely accepted hypothesis is direct dissemination through the peritoneum. (8) Given its location, it is easily accessible for biopsy samples to be taken for histological analysis to establish malignant etiology. (8)

The nodule of Sister Mary Joseph is associated with poor oncological and vital prognosis. (9) It is associated with advanced stages of the disease, multiple metastatic lesions and peritoneal compromise. (10)

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