SISTER MARY JOSEPH NODULE, CASE REPORT

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CASE HISTORY

A 82 year old woman presented to Accident and Emergency department feeling generally unwell with loss of appetite. Three days later she started to complain of abdominal pain and vomiting. There were no associated fevers or night sweats. Physical examination revealed generalised abdominal tenderness and distension. There was an umbilical nodule, with some umbilical discharge. This was initially diagnosed as small para-umbilical hernia. Two days later she developed intestinal obstruction which was confirmed by a plain abdominal x-ray (fig1). CT scan showed marked dilatation of the caecum with fluid level, ill defined thickening in the hepatic flexure region with small amount of ascites. Re-examination of umbilicus intra operatively confirmed the presence of Sister Marie Joseph nodule, (fig2 ). Laparotomy revealed an obstructed hepatic flexure tumor with distended ischemic Caecum impeding perforation. There were multiple metastatic peritoneal and mesenteric nodules. Palliative Right Hemicolectomy was performed.. Histo-pathology confirmed the presence of Mucinous Adenocarcinoma, Dukes C1, stage T4 N2 M1, with metastatic deposit in the umbilicus. Post-operatively the patient was transferred to the ITU. She could not be weaned off the ventilator and in view of her advanced disease, escalation of treatment was not carried out.

DISCUSSION

Sister Mary Joseph’s nodule refers to secondary cancer metastasis appearing in the umbilicus, usually spreading from an advanced peritoneal malignancy. The sign was noticed by a Franciscan nun, after whom it was named. Sister Mary Joseph worked as a surgical assistant to Dr. William J Mayo. However it was not until 1949, 10 years after her death, that Sir Hamilton Bailey used the term in his textbook Physical Signs in Clinical Surgery ¹. The primary is usually a gastrointestinal malignancy mostly of gastric, colonic or pancreatic origin. There are some case reports of ovarian or uterine origin. The metastases reach the umbilicus via direct peritoneal spread.
or via lymphatic spread that run alongside the obliterated umbilical vein or via planes within the embryological remnants (Urachus and Vitelline duct)².

This is a sign of advanced malignancy and surgical treatment offered is mostly palliative.

**CONCLUSION**

Sister Mary Joseph nodule continues to be a rare sign which reflects an advanced metastatic malignancy. The diagnosis may influence the surgical decision hence it has to be considered among the differential diagnosis of umbilical lesions.

Figure 1.
Figure 2.

Figure 3
REFERENCES