Metastatic Pancreatic Adenocarcinoma Found Incidentally In A Paraumbilical Hernia Sac
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Citation

Abstract
This case report describes what we believe to be the first reported case of occult metastatic pancreatic adenocarcinoma being found incidentally in a paraumbilical hernia sac. Following an otherwise uneventful repair of a parumbilical hernia, routine histology showed the sac to contain an adenocarcinoma. Subsequent investigations showed that the primary adenocarcinoma arose in the pancreas. This occult metastatic pancreatic adenocarcinoma would not have been located if it were not for our departmental practice of sending all excised tissue for histological examination.

This case arose at the Health Labrador Center in Goose Bay, Labrador, Canada.

INTRODUCTION
We present here what we believe to be the first reported case of occult metastatic pancreatic adenocarcinoma being found incidentally in a paraumbilical hernia sac. Following an otherwise uneventful repair of a parumbilical hernia, routine histology showed the sac to contain an adenocarcinoma. This finding in itself is relatively rare, with published data indicating that metastatic cancer is present in less than 0.4% of surgically excised hernia sacs from all locations. What makes this case exceptional is the primary site of the adenocarcinoma, which subsequent investigations revealed to be the pancreas, as well as the location of the hernia in which the metastasis was found. A review of the literature turned up no previous cases where a pancreatic adenocarcinoma was found incidentally in a paraumbilical hernia sac. The only related cases we could find were two confirmed reports of pancreatic adenocarcinomas being found in inguinal hernia sacs \( 2,3 \) and one case of a possible pancreatic adenocarcinoma in an inguinal hernia sac.\(^4\)

CASE REPORT
A 58 year old man was referred for the surgical repair of a paraumbilical hernia, which had been discovered during a routine physical examination by a family physician approximately two weeks earlier. He otherwise felt generally healthy, with no other medical concerns. Specifically, he did not have any abdominal pain or discomfort, nor did he have any systemic symptoms such as weight loss, chills, or night sweats. He had a past medical history significant for hypertension, diabetes mellitus type II, hypercholesterolemia, hypertriglyceridemia, and recurrent duodenal ulcer disease which had been treated with a vagotomy and pyloroplasty approximately 30 years earlier. He did not have a history of smoking; however he did have a history of heavy alcohol consumption on weekends. His physical examination was unremarkable apart from previous surgical scarring and a small reducible paraumbilical hernia. His pre-operative blood work was all within normal limits. At operation, the hernia repair was uneventful, with no grossly concerning pathology noted. There was omentum found in the hernia sac, and both the omentum and the hernia sac were excised and sent to the pathology department for examination. The pathologist found the specimen to be grossly unremarkable, however histology showed the presence of a well differentiated adenocarcinoma. In an attempt to locate the primary site of the adenocarcinoma, a CT scan of the chest, abdomen, and pelvis was performed. The CT scan revealed a 3cm x 5cm mass involving the tail of the pancreas (Figure 1), as well as a 1.3cm nodule in the liver, likely representing a metastasis of the pancreatic primary. The patient was subsequently referred to the oncology department for adjuvant therapy.
Figure 1

Figure 1: CT scan showing a 3cm x 5cm mass involving the tail of the pancreas.

DISCUSSION

Rarely, cutaneous metastases from pancreatic adenocarcinomas to the umbilicus region have been reported. The term 'Sister Mary Joseph's nodule' arose from the clinical observations of a nurse from the Mayo Clinic in Rochester, USA, and is used to describe umbilical lesions arising from visceral carcinomas, without taking into account the specific site of the primary tumour. This may manifest as a morphologically firm nodule, a profound node, an indurated plaque or nodule with a vascular appearance, an uncharacteristic diffuse hardening of the umbilical region, or as a fissured and ulcerated lesion with some fetid discharge. None of these findings were present in the case described here, with physical examination and surgery showing nothing more than a paraumbilical hernia with a clear facial defect. Whether this had the potential to develop into a so-called 'Sister Mary Joseph's nodule' is unknown.

This occult metastatic pancreatic adenocarcinoma would not have been located if it were not for our departmental practice of sending all excised tissue for histological examination. Some authors have advocated routine histological examination of excised hernia sacs to search for occult cancer, while others have concluded that this is a poor diagnostic procedure, stating that it is neither cost effective nor useful. While we have described only one case here, it will add to the body of literature which may eventually help to resolve this type of dispute.

References

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