Positive staging laparoscopy in resectable pancreatic cancer; a case report and a review of the literature

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Introduction

Pancreatic cancer staging represents a challenge in modern medicine. Curative treatment is sought in patients with resectable disease. The goal of staging workup is to delineate the extent of the disease and identify patients who are eligible for resection with curative intent. Multi-phase contrast-enhanced thin-slice CT scan (MDCT) is the preferred method for staging and assessing tumor resectability. Approximately 20% of patients deemed resectable in MDCT are found non-resectable in staging laparoscopy (SL). Indications for SL are not universally accepted and can miss patients with distant metastasis.

Case presentation

A 40y old male patient presents with a 6w history of epigastric pain and jaundice. ERCP showed intrapancreatic CBD stenosis and endoscopic US found a 1.75 x 1.3 cm pancreatic head tumor, FNA was positive for pancreatic adenocarcinoma. An MDCT and PET-CT were performed with no evidence of vascular invasion or distant metastasis, CA 19-9 was 37.28 U/mL. SL found a 0.3 cm liver mass on segment VII, frozen section was positive for metastatic disease.

Discussion

SL is not routinely performed and current guidelines indicate that SL can be considered in patients with a resectable tumor in CT scan plus a high-risk feature (elevated CA 19-9, large primary tumors, large regional lymph nodes, excessive weight loss, extreme pain). Tumor size (>3cm) and CA 19-9 (≥150 U/mL) cut-off values have been proposed to predict which patients would benefit most from a SL. Our patient met neither criteria and metastasis was found on SL. Although current literature states T1 tumors are unlikely to have metastasis, MDCT can fail to identify occult metastatic disease (hepatic or peritoneal metastases), and routinely performing SL identifies occult metastasis before a laparotomy incision has been made.

Conclusion

SL is a useful tool in pancreatic cancer staging, it can help identify occult metastatic disease in previously resectable tumors and can therefore help avoid futile laparotomy. It should be considered in all patients with resectable tumors in MDCT.

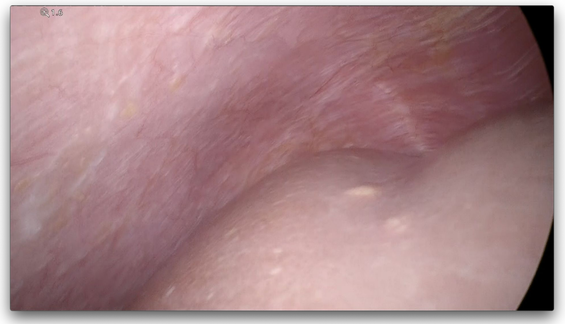


Fig 1. Macroscopic metastasis seen on SL

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