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VIDEO

Laparoscopic resection of uncinate process of the pancreas

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Abstract
Background Solid pseudopapillary neoplasm of the pancreas is an uncommon but distinctive pancreatic neoplasm with low metastatic potential [1]. Therefore, whenever feasible, an organ-preserving operation should be performed. As previously reported, women with solid pseudopapillary neoplasm of the pancreas may be best treated by more conservative procedures [2]. Recently, laparoscopic pancreatic resections became more common and are being performed in highly specialized centers. There are only six cases of laparoscopic resection for solid pseudopapillary neoplasm of pancreas published in the English literature and, to our knowledge, laparoscopic resection of uncinate process of the pancreas has never been reported [3–6]. This video demonstrates the technical aspects of a totally laparoscopic resection of the uncinate process of the pancreas in a patient with solid pseudopapillary neoplasm.
Methods A 26-year-old woman with a 4-cm solid pseudopapillary pancreatic neoplasm was referred for surgical treatment. According to preoperative echoendoscopy, there was a safe margin between neoplasm and main pancreatic duct. The patient was placed in supine position with the surgeon standing between her legs. Four trocars, one 10-mm and three 5-mm, were used. At inspection, the inferior vena cava, transverse colon, duodenum, and pancreas are clearly identified. A Kocher maneuver was performed with complete exposure of pancreatic head and uncinate process. The uncinate process was dissected from the superior mesenteric vein and venous branches were divided between metallic clips or by use of laparoscopic coagulation shears (LCS; Ethicon Endo Surgery Industries, Cincinnati, OH, USA). Blood supply of the duodenum was preserved by ligature of small pancreatic branches from inferior pancreatoduodenal artery. Transection of pancreatic parenchyma was performed using laparoscopic coagulation shears, which is an effective tool for cutting the pancreas [7, 8]. Surgical specimen was removed through a suprapubic incision inside a retrieval bag. A hemostatic absorbable tissue (Surgicel; Ethicon Inc., Cincinnati, OH) was placed in the cutting pancreatic surface, and one round 19F Blake abdominal drain (Ethicon) was left in place.
Results Operative time was 180 minutes and blood loss estimated in 40 ml with no blood transfusion. Hospital stay was 4 days. The patient did not have postoperative pancreatitis or pancreatic leakage, and the abdominal drain was removed on the tenth postoperative day. Final pathology confirmed the diagnosis of solid pseudopapillary neoplasm of pancreas with free surgical margins. The patient was well and asymptomatic 2 months after the procedure.
Conclusions Laparoscopic resection of uncinate process of the pancreas is safe and feasible and should be considered for patients suffering from pancreatic neoplasms.

Keywords Liver · Laparoscopy · Technique · Pancreas · Uncinate process · Anatomy · Solid pseudopapillary neoplasm

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