



Whipple's Subtotal Stomach Preserving Pancreaticoduodenectomy by the SMA first Approach

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Abstract

Periampullary tumours consist of adenocarcinoma of the head, neck and uncinate process of the pancreas, ampulla, distal common bile duct and ampullary duodenum.⁽¹⁾ Pancreaticoduodenectomy since its initial description in 1935 by Whipple et al and with its various modifications henceforth, is the standard surgical treatment for the malignancies described above. In 2006, Pessaux et al described the "SMA first approach" of pancreaticoduodenectomy which includes the dissection of the origin of the superior mesenteric artery first, thus saving the surgeons from reaching a point of no return in cases of involvement of superior mesenteric artery in classical pancreaticoduodenectomy.⁽²⁾ Subtotal stomach preserving pancreaticoduodenectomy was described in the 1990s in Japan. It involves division of the stomach 3-4 cm proximal to the pylorus, thus retaining much of the body of the stomach. We report the case of a 35 year old lady who presented to the emergency with obstructive jaundice. On evaluation CEMR with MRCP showed narrowing in the terminal CBD with wall thickening and upstream biliary dilatation without a definite conclusion. The total bilirubin level remained static for almost 3 weeks. The Endoscopy report was inconclusive. We decided to proceed with Whipple's pancreaticoduodenectomy by the "SMA first approach" and Subtotal stomach preserving Pancreaticoduodenectomy. The patient recovered well without any major complication and was discharged on the 14th post operative day.

Case Report

A 35 year old lady presented to the Emergency Department GMCH with complaints of yellowish discoloration of eyes and urine and mild on and off pain since 20 days. She had taken herbal medication for jaundice. Her appetite had decreased and her bowel habit was irregular. She

had passage of clay coloured stool. However there was no waxing and waning of her jaundice. Her CEMR with MRCP report suggested narrowing in the terminal CBD and upstream biliary dilatation with the possibility of periampullary neoplasia. Side viewing endoscopy was done but inconclusive. Her total bilirubin level remained

static over the work up period. Since both the CT and endoscopy report was inconclusive we decide to proceed for Whipple's pancreaticoduodenectomy by the SMA first approach. After proper preoperative preparation patient was put up for surgery. The superior mesenteric artery was found to be tumour free during dissection and so we proceeded. The dissection was further completed by a subtotal stomach preserving pancreaticoduodenectomy and the right hepatic artery lymph node and peripancreatic lymph nodes were sent for biopsy. The biopsy report came out as well differentiated adenocarcinoma of the Ampulla of Vater with the surgical resected margins free of tumour.

Discussion

Periampullary cancer is the 4th leading cause of death in the United States.⁽³⁾ Delayed Gastric Emptying is one of the most common complication after pancreaticoduodenectomy.⁽⁴⁾ After pylorus preserving pancreaticoduodenectomy DGE results due to impairment of the coordination of the antro-pyloric region.⁽⁵⁾ Hence SSPPD was introduced which retains most of the gastric reservoir function. In the end the surgery was performed by SMA first approach with SSPPD which benefitted the patient well who could be discharged without any major complications.

References

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