

Laparoscopic Spleen Preserving Distal Pancreatectomy

Department of Surgery, Seoul National University College of Medicine, Seoul National University Bundang Hospital

Ho Seong Han

Since the introduction of laparoscopy, application on laparoscopic surgery for pancreas is increasing these days. There are several kinds of laparoscopic surgical procedure including distal pancreatectomy, pancreaticoduodenectomy, central pancreatectomy, enucleation, etc. Although, laparoscopic pancreaticoduodenectomy is still controversial due to its difficult techniques, laparoscopic distal pancreatectomy is frequently used as an optional treatment method for the lesions in body and tail of pancreas, when the lesion is considered benign or premalignant. Laparoscopic enucleation is an also good treatment modality when the lesion is presumed to be benign and small such as insulinoma. Laparoscopic distal pancreatectomy can be classified into spleen preserving and spleen sacrificing technique. The spleen preserving technique can be further classified into splenic vessels preserving method and vessels sacrificing method called as Warshaw's method. The splenic vessels preserving method requires longer operation time and more complicated techniques. The splenic vessel sacrificing method is simpler and suit for conditions when malignancy is suspected. However, the application of laparoscopic technique to malignancy is still contraindicated and still there are few reports on this disease entity.

We retrospectively analyzed of the clinical outcome of 110 patients who underwent laparoscopic pancreas surgery from June 2004 to September 2010. As regards to the technique of distal pancreatectomy, preservation of splenic vessels and spleen was tried unless the tumor was very close to splenic hilum or malignancy

was suspected in preoperative radiologic studies. For pancreaticoduodenectomy, both laparoscopy assisted method and totally laparoscopic method have been used. Operation types were 87 cases of distal pancreatectomy, 10 cases of pancreaticoduodenectomy, 6 cases of central pancreatectomy, 4 cases of enucleation and 3 other operations. Among 87 patients operated on distal pancreatectomy, there were 10 patients who were diagnosed as pancreatic malignancy. Eight patients are still alive without recurrence of tumor at mean follow-up period of 30 months. One patient with recurrence is alive for 60 months post-operatively and one remaining patient has expired due to liver metastasis. Our experiences show that laparoscopic pancreas surgery is becoming attractive option for pancreas disease.

References

1. Yoon YS, Lee KH, Han HS, Cho JY, Ahn KS. Patency of splenic vessels after laparoscopic spleen and splenic vessel-preserving distal pancreatectomy. *Br J Surg.* 2009; 96(6):633-40.
2. Eom BW, Jang JY, Lee SE, Han HS, Yoon YS, Kim SW. Clinical outcomes compared between laparoscopic and open distal pancreatectomy. *Surg Endosc.* 2007 Nov 20
3. Han HS, Min SK, Lee HK, Kim SW, Park YH. Laparoscopic distal pancreatectomy with preservation of the spleen and splenic vessels for benign pancreas neoplasm. *Surg Endosc* 2005;19:1367-9