Topic : Biliary & Pancreas

LAPAROSCOPIC PANCREATICODUODENECTOMY: ACHIEVING SAFE AND EFFICIENT OUTCOMES WITHIN TIME CONSTRAINTS

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Background : Laparoscopic pancreaticoduodenectomy (LPD) is a highly complex procedure, performed in Japan only at select institutions that meet stringent facility standards and by expert surgeons with advanced technical skills. Amid ongoing work style reforms, completing tasks, including high-complexity surgeries, within regular working hours has become a critical demand. For young surgeons training in LPD, the dual challenge of mastering intricate techniques and minimizing operative time creates a rigorous learning environment.

Methods : Our institution performed 20-30 pancreatic resections annually until the arrival of an expert surgeon, which led to a significant increase in case volume. In 2024, we achieved facility certification for LPD. Under expert supervision, 12 LPD were performed by a young, inexperienced pancreatic surgeon. The surgical team, excluding the scopist, remained constant across all cases.

Results : The median operative time was 6 hours and 44 minutes, with a median blood loss of 30 mL. All procedures achieved R0 resection for malignancies, with no open conversions or severe perioperative complications. Notably, all procedures were completed within regular working hours, demonstrating that LPD can be safely and effectively performed under strict time constraints without compromising oncological outcomes, even by young surgeons.

Conclusions : We present a case of LPD for ampullary carcinoma with lymphadenectomy. The operation time was 6 hours, with a blood loss of 5 mL. Key technical steps, superior mesenteric vein exposure, gastrocolic trunk dissection, bile duct and pancreas transection, and pancreatic head plexus dissection, will be highlighted in the accompanying surgical video.

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