

**EP174****The risk factors influencing severe pancreatic exocrine insufficiency measured by stool elastase after pancreatoduodenectomy**

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Introduction : Pancreatic exocrine insufficiency after pancreatectomy affects clinical outcomes of patients in postoperative course. This study aimed to analyze risk factors influencing severe pancreatic exocrine insufficiency (PEI) after pancreaticoduodenectomy measured by patient's stool elastase (SE) level.

Methods : Among patients who received pancreaticoduodenectomy in Seoul National University Hospital from October 2007 through February 2013, patients who measured both preoperative and postoperative SE level were included. Deteriorated (exocrine function) group was defined as patients who decreased from 100 µg/g or more preoperatively to less than 100 µg/g postoperatively.

Results : Of 202 included patients, 135 patients were deteriorated group and 67 patients were maintained group. Patients in deteriorated group had higher preoperative stool elastase level (309.6 vs. 143.0, $p < 0.001$), benign diseases (26.7% vs. 13.4, $p=0.033$), presence of clinically relevant postoperative pancreatic fistula (19.3% vs. 7.5%, $p=0.029$) compared to maintained group. Postoperative weight showed the lowest at postop 3 months and recovery at 12 months. Weight change in postop 3 months was significantly different between two groups (-4.6 vs. -3.5, $p=0.045$). Patients who did not recover their weight of postop 3 months at postop 12 months had higher portion of adjuvant radiotherapy, presence of postoperative pancreatic fistula and high grade of complication compared to recovery group.

Conclusions : Those with benign diseases and clinically relevant postoperative pancreatic fistula have a tendency of marked deterioration of pancreatic exocrine function after pancreatoduodenectomy. Therefore physicians should pay attention to support PEI in those with risk factors such as monitoring of exocrine function and optimal enzyme supplements.

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