

Pancreatic fistula after laparoscopic splenectomy in patients with hypersplenism due to liver cirrhosis: effect of fibrin glue and polyglycolic acid felt on prophylaxis of postoperative complications.

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Abstract:

Background This study aimed to determine the effect of fibrin glue and polyglycolic acid (PGA) felt on prevention of pancreatic fistula (PF) after laparoscopic splenectomy in patients with hypersplenism due to liver cirrhosis. **Methods** Fifty consecutive patients were enrolled in this prospective study. Twenty-three patients underwent laparoscopic splenectomy with a fibrin sheet (fibrin sheet group). The sealing ability of each treatment was evaluated by an ex vivo pressure test model. Based on the results from ex vivo experiments, 27 patients received prophylaxis using fibrin glue and PGA felt (PGA with fibrin group). The primary endpoint was the incidence of PF. **Results** Significantly more (5, 22%) patients developed PF in the fibrin sheet group than in the PGA with fibrin group (0%, $P = .037$). **Conclusions** Our new application of fibrin glue and PGA felt is an effective prophylactic procedure for preventing development of PF after laparoscopic splenectomy.

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