

CLINICAL COURSE OF SPLENIC INFARCTION AFTER SPLEEN PRESERVING DISTAL PANCREATECTOMY

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Background : Spleen-preserving distal pancreatectomy (SPDP) is a surgical procedure commonly used for benign or borderline malignant pancreatic diseases. SPDP can be performed using the Warshaw technique, which is popularly used because it is technically easy but has a risk of splenic infarction. This study aimed to evaluate the incidence, risk factors, and clinical course of splenic infarction following the Warshaw technique.

Methods : Patients who underwent SPDP using the Warshaw technique at Samsung Medical Center between 2007 and 2022 were retrospectively analyzed. Postoperative CT scans were reviewed by a single researcher to classify splenic infarction grades based on the extent of infarction (0-25%, 26-50%, 51-75%, 76-100%).

Results : Among 335 SPDP cases, the Warshaw technique was used in 158 patients. The mean age was 54.27 years, with 58 males and 100 females. Surgical approaches included open surgery (7.6%), laparoscopic surgery (87.3%), and robotic surgery (5.1%). The most common diagnoses were solid pseudopapillary neoplasm and pancreatic neuroendocrine tumor (20.9% each). Complications which are Clavien-Dindo grade 3 or higher occurred in 13 patients (8.2%), and splenic infarction occurred in 75 patients (47.5%), with 34 cases (21.5%) classified as severe infarction (>50%). Risk factor analysis for severe infarction revealed that only previous abdominal surgery as a significant risk factor in multivariate analysis. Among the 75 patients with splenic infarction, two required management with antibiotics, and none required radiologic intervention.

Conclusions : In conclusion, splenic infarction following the Warshaw technique for SPDP is mostly clinically insignificant, supporting its use as a feasible option for benign or borderline malignant pancreatic diseases.

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