

## **An Attempt to Build a National Prospective Electronic Database for Pancreaticoduodenectomies in Romania – Preliminary Results of the First Year Enrollment**

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### **Abstract**

**Introduction:** National databases for pancreaticoduodenectomies (PD) have contributed to better postoperative outcomes after such complex surgical procedure because the multicentre collection of data allowed more reliable analyses with quality assessment and further improvement of technical issues and perioperative management. The current practice and outcomes after PD are poorly known in Romania because there was no national database for these patients. Thus, in 2016 a national-intent electronic registry for PD was proposed for all Romanian surgical centers. The study aims to present the preliminary results of this national-intent registry for PD after one-year enrollment.

**Patients & Methods:** The database was started on October 1st, 2016. Data were prospectively collected with an electronic online form including 102 items for each patient. The registry was opened to all the Departments of Surgery from Romania performing PD, with no restriction.

**Results:** During the first year of enrollment were collected the data of 181 patients with PD performed by 24 surgeons from four surgical centers. The age of patients was 64 years (28 – 81 years), with slightly male predominance (61.3%). Computed tomography was the main preoperative imaging investigation (84.5%). All the PDs were performed by an open approach. The Whipple technique was used in 53% of patients, and a venous resection was required in 14.3% of cases. A posterior approach PD was considered in 16.6% of patients. The stomach was used to treat the distal remnant pancreas in 50.1% of patients. The operative time was 285 min (110 – 615 min), and the estimated blood loss was 400 ml (80 – 3000 ml). The overall morbidity rate was 55.8%, with severe (i.e., grade III-IV Dindo-Clavien) morbidity rate of 10%, and 3.9% in-hospital mortality rate. The overall pancreatic fistula, delayed gastric emptying and hemorrhage rates were 19.9%, 39.8% and 15.5%. Periampullary malignancies were the main indications for PD (78.9%), with pancreatic cancer on the top (48%).

**Conclusions:** To build a prospective electronic online database for PD in Romania appears to be a feasible project and a useful tool to know the current practice and outcomes after PD in our country. However, improvements are still required to encourage a larger number of surgical centers to introduce the data of patients with PD.

**Key words:** pancreaticoduodenectomy, national registry, outcomes