

## **Pancreatic Resections: Frequency, Safety and Usefulness of Postoperative Interventional Radiology**

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**Context** Interventional radiology (IR) have increased for the first-line management of postoperative complications after pancreatic resections. **Objective** To evaluate frequency, safety and usefulness of IR. **Methods** Patients with postoperative complications after pancreatic resections were analyzed for the use of IR procedures. Patients in which IR was performed were compared with those in which IR was not performed, regarding type of pancreatic resections, diagnosis, post-operative mortality and morbidity according Clavien-Dindo classification, post-operative pancreatic fistula (POPF), post-pancreatectomy hemorrhage (PPH), bile leakage, reoperations rate and length of hospital stay (LOS). **Results** Two-hundred and ninety patients were recorded: 182 (72.8%) experienced postoperative complications, 67 (36.8%) Clavien grade  $\geq 3$ . IR was performed in 37 cases (20.3%): in 28 (75.7%) a percutaneous drainage (PD) of an abdominal fluid collection, in 8 (21.6%) a transhepatic biliary drainage (PTBD) and an arterial embolization (AE) in 3 cases (8.1%). IR was performed 14 $\pm$ 6.7 days after surgery, with technical success in all cases and

clinical success in 75.7%. Re-operation rate after IR was 13.5%, thus re-operations were avoided in 32 (86.5%) cases. Mortality after IR was 16.2%; 4 (66.7%) patients died after a re-laparotomy post-IR. Mean LOS was 18.3 $\pm$ 14.4 days. There were no statistical differences between the IR group and the non-IR group regarding type of resection, pathological diagnosis, postoperative mortality and reoperation rate. Patients with clinically relevant POPF and bile leak were treated with IR more frequently than without IR ( $P < 0.001$  and  $P = 0.009$ , respectively). Patients with late PPH were treated more frequently with IR ( $P = 0.030$ ), as well as patients with PPH grade C ( $P = 0.029$ ). Patients with a Clavien score  $\geq 3$ , were treated significantly more frequently with IR ( $P < 0.001$ ). Finally, patients treated with IR had a significant longer LOS than those in the non-IR group (37.5 $\pm$ 23.4 vs. 18.7 $\pm$ 11.7 days;  $P < 0.001$ ). **Conclusions** IR procedures are feasible and safe especially for postoperative pancreatic fistula and bile leak. They are useful because promptly can resolve several life-threatening complications avoiding re-operations.