

Robotic Distal Pancreatectomy: Is Hybrid Operation a Viable Approach?

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Context Robotic distal pancreatectomy (RDP) is a safe and feasible operation with increasing reports in the literature. The debate is still open whether a hybrid approach could be a viable option *versus* a fully robotic operation. **Objective** To analyze the preliminary experience with RDP comparing a hybrid *versus* a fully robotic approach. **Methods** All patients undergone RDP were analyzed. A hybrid approach was initially preferred, using laparoscopic harmonic scalpel to perform some steps of operation, including pancreatic gland transection. Patients' characteristics, pre- and intra-operative data as well as postoperative outcome were prospectively collected in an institutional database. Size of tumor, time of operation and robotic docking, blood loss, post-operative pancreatic fistula (POPF), intra-abdominal fluid collection, and postoperative stay were recorded. **Results** Five consecutive patients (4 females) underwent RDP between December 2011 and July 2012. Mean age was 55 years (range 34-77 years); mean tumor size was 35 mm (range 10-53 mm). Two spleen preserving RDP were performed. Mean operative time was 275 min

(range 210-450 min); robotic procedure time was 158 min (range 60-285 min). One patient was converted to open procedure because of uncontrolled splenic artery bleeding during pancreatic gland transection. Two patients experienced blood loss requiring intra-operative transfusion. One patient was re-operated on because of intra-abdominal fluid collection and partial splenic infarction developed on 5 post-operative day. Two POPF developed (1 grade A and 1 grade B). Mean hospital stay was 13.5 days (range 10-20 days). Histological specimens were consisted of 2 neuroendocrine tumors and 3 mucinous cystadenomas. Two asymptomatic intra-abdominal fluid collections were followed with periodic US investigation and up to now do not necessitate of any active treatment (follow up ended on July 2012). **Conclusion** A hybrid approach was initially preferred to perform RDP taking origin from more than a decade of experience in laparoscopic distal pancreatectomy. On the basis of overall results obtained we have decided to adopt a fully robotic technique to perform RDP.