**Distal Pancreatectomy for Pancreatic Neuroendocrine Tumours (pNETS):**

**Which Approach?**

Sutandi N, Logue JA, Robinson SM, French JJ, Wilson C, Charnley R, Manas DM, White SA.

**Aim**

Pancreatic neuroendocrine tumours (pNETS) are rare. Laparoscopic distal pancreatectomy (LDP) is the mainstay of treatment in most specialist centres for those needing resection. To date, there has been no previous UK report of using the robotic approach (RDP) for resection of pNETs. The aim of this study was therefore to assess the safety and efficacy of RDP compared with established open and LDP.

**Methods**

Data for our minimally invasive approaches (laparoscopic and robotic) were recorded prospectively whereas details for the open group were collected retrospectively. All resections performed during a 10 year period (2007-2017) were compared with RDP introduced as our standard approach in 2014. Complications were graded according to the Clavien-Dindo classification.

**Results**

33 patients (age range 17-76 years) underwent distal pancreatectomy with or without splenectomy these included open (n=9), laparoscopic (n=14) and robotic (n=10). BMI (kg/m2) was equivalent across all groups. There were 2 conversions in the laparoscopic group, none in the robotic group with no mortality. Docking and robotic set up took an additional 47 minutes (range 27- 75). There was no difference in histological grade, Ki67, R0 resection margin status or lymph node yield between groups. Tumour size was largest in the open group (p = 0.03). Postoperative stay, pancreatic fistula rates, re-operation and blood loss were not statistically different. Splenic preservation was significantly higher in the robotic versus laparoscopic group (p=0.02) and major 30-day morbidity (Clavien-Dindo grade 3 or 4) was reduced in the robotic group (p=0.034).

**Conclusion**

RDP is a safe and efficacious technique for the management of pNETs. It offers the advantages of higher rates of splenic preservation over the laparoscopic approach and a reduction in incidence of major 30-day morbidity with comparable oncological outcomes.