Pancreatic Pseudocysts Dilemma; Cumulative Multicenter experience in Management using Endoscopy, Laparoscopy, and open surgery

By

Alaa A. Redwan\* M.D, Ph.D., Mostafa A. Hamad\*\* M.D, Ph.D.,

and Mohammed A. Omar\*\*\* M.D.

 \* Department of General Surgery, Sohag University, Sohag

 \*\* Department of General Surgery, Assuit University, Assuit

\*\*\* Department of General Surgery, South Valley University, Qina

**Abstract**

**Introduction and aim of the work:** Pancreatic pseudocyst is the commonest cystic lesion of the pancreas. When interference is indicated, open surgical therapy is the standard therapy with which other therapeutic modalities should be compared. Recently, endoscopic and laparoscopic approaches were reported for management of these cases. We aimed at exploring the minimally invasive techniques in treatment of pancreatic pseudocysts, namely endoscopic and laparoscopic, and comparing them to the open surgical therapy.

**Patients and methods:** Fifty nine patients with pancreatic pseudocyst assigned for interference were included in this study. Thirty five patients were treated endoscopically, two laparoscopically and twenty two by open surgery. The endoscopic techniques used were cystogastrostomy in thirty cases, cystoduodenostomy in three cases, and trans-ampullary drainage in two patients. In the laparoscopic cases, a loop-sutured cystojejunostomy was done. The open surgical techniques were cystogastrostomy in fifteen patients and cystojejunostomy in seven patients.

**Results:** The endoscopic therapy had the shortest procedure time (30 min) in comparison to 110 and 105 min for the laparoscopic and open surgical groups respectively. No mortality was reported in any of the groups. Postoperative complications represent 14%, 40% for the endoscopic and the open surgical groups respectively. The hospital stay was shorter for both endoscopic and laparoscopic cases than open surgical cases.

**Conclusion:** Minimally invasive therapeutic techniques, whether endoscopic or laparoscopic for treatment pancreatic pseudocyst could be considered valuable, competitive and promising alternatives for open surgery. Moreover, it is less invasive, less coasty, with less hospitalization and rapid return to work. Large scale comparative studies are highly recommended in the future.

**Key words:** pancreatic pseudocyst, cystogastrostomy, cystojejunostomy.