

### **Impact of Preoperative Endoscopic Biliary Drainage on Postoperative Outcome after Pancreaticoduodenectomy**

Hazem M Zakaria<sup>1</sup>, Nahla K Gaballa<sup>2</sup>, Mohammed Abbas<sup>3</sup>, Osama Elbahr<sup>4</sup>, Talaat Zakareya<sup>4</sup>

<sup>1</sup>Department of Hepatopancreatobiliary and Liver Transplant Surgery, National Liver Institute, Menoufia University, Menoufia, Egypt

<sup>2</sup>Department of Anesthesia and Intensive Care, National Liver Institute, Menoufia University, Menoufia, Egypt

<sup>3</sup>Department of Diagnostic and intervention radiology, National Liver Institute, Menoufia, Egypt

<sup>4</sup>Department of Hepatology and Gastroenterology, National Liver Institute, Menoufia University, Menoufia, Egypt

#### **Abstract**

**Background:** The value of preoperative biliary drainage (PBD) on the surgical outcome after pancreaticoduodenectomy (PD) is still a point of controversy. The aim of this study was to identify the impact of biliary drainage (BD) prior to PD on the postoperative outcome.

**Methods:** The data of patients, who underwent PD from February 2009 to February 2017, were retrospectively studied. A comparison was performed between 2 groups of patients; group A (with PBD) and group B (without PBD), according to preoperative, operative and postoperative data.

**Results:** PD was performed in 158 patients with periampullary lesions. Group A, included 76 patients (48.1%) while 82 patients were included in group B (51.9%). The incidence of major postoperative complications was significantly higher in group A ( $P=0.04$ ). The infectious complications were higher in group like; positive intraoperative bile culture ( $P=0.06$ ), intraabdominal abscess ( $P=0.07$ ) and wound infection ( $P=0.04$ ). Also, hospital stay and mortality were higher in group A ( $P=0.05$  and  $0.08$ , respectively). High preoperative bilirubin level was not a risk factor for major postoperative complications ( $P=0.12$ ).

**Conclusion:** Patients with PBD had a significantly higher incidence of major postoperative complications mainly of infectious ones, thus PBD should be performed only in selected patients, not as a routine prior PD.

**Key words:** biliary drainage, pancreaticoduodenectomy, postoperative complications, wound infection