

Category : **Infections + antimicrobials**

**A267 - A monocentric observational analysis of the use of prophylactic antimicrobial therapy and perioperative cultures during pancreaticoduodenectomy**

**A De Wilde**<sup>1</sup>; **J Fierens**<sup>2</sup>; **J De Waele**<sup>2</sup>; **P Depuydt**<sup>2</sup>; **F Berrevoet**<sup>3</sup>; **F Gryspeerdt**<sup>3</sup>; **L De Bus**<sup>2</sup>

<sup>1</sup>University hospital Ghent, Intensive Care, Gent, Belgium, <sup>2</sup>University hospital Ghent, Intensive Care Unit, Gent, Belgium, <sup>3</sup>University hospital Ghent, General and HPB surgery, Gent, Belgium

**Introduction:**

Postoperative infections (PI) are common after major surgery. To reduce PI after pancreaticoduodenectomy (PD), perioperative antimicrobial therapy (AMT) is often prophylactically administered. At our hospital, amoxicillin-clavulanic acid (AMC) or piperacillin-tazobactam (PTZ) is given in the absence or presence of biliary stenting respectively.

The objective of this study is to analyze antimicrobial susceptibility of perioperative biliary cultures in relation to prophylactic AMT and the incidence of PI.

**Methods:**

All adult patients undergoing PD in our hospital from 2015 until 2020 were evaluated for inclusion.

Analysis included demographics (gender, age, BMI, APACHE and SAPS on admission, median SOFA score), prophylactic AMT details, perioperative biliary cultures and characteristics of PI.

**Results:**

Out of 261 patients who underwent PD, 78 (29.9%) had a biliary stent, 183 did not.

Perioperative cultures were positive in 71 (91.2%) stent patients and in 36 (19.7%) non-stent patients (P<0.05).

In stent patients, 29 (40.9%) cultures were resistant to PTZ. In non-stent patients, 17 (47.2%) cultures were resistant to AMC. *Enterobacteriales* and *Enterococci* were most commonly found in both groups.

Most frequent PI were intra-abdominal infections and superficial wound infections. More PI were diagnosed in non-stent patients (46 patients, 25.1%) than in stent patients (9 patients, 11.4%). Pathogens identified in PI often differed from perioperative biliary cultures and were resistant to earlier prophylactic treatment (23 non-stent patients (50%), 7 stent patients (77.8%)).

**Conclusion:**

This study shows *Enterobacteriales* and *Enterococci* as our most common biliary pathogens, independently of the presence of a biliary stent. Therefore if prophylactic AMT in PD would be undertaken, it should preferably be tailored to biliary tract ecology. PI were present in 1 out of 5 patients, more prevalent in non-stent patients and often associated with need for widening AMT, highlighting rigorous culture procurement in PI.