



RESEARCH TOPIC CLI11

Prevention and treatment of surgical site infections in patients undergoing pancreatic resection: a tailored translational approach

Research Area

Surgical Area

Clinical Unit name

Pancreatic Surgery Unit

Supervisor

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Abstract

The most common initial symptom of periampullary cancer is obstructive jaundice¹. Previously, biliary stenting was used to enhance the condition of patients before surgery, but now it is essential with the advent of neoadjuvant therapy^{2,3}. However, this procedure often leads to bile contamination by multidrug-resistant bacteria, which increases the likelihood of post-surgical infections at the site of organ surgery, significant health complications, and worse cancer treatment outcomes following pancreatic operations^{4,5}. This project plans to identify and examine the primary bacteria and their responses to antibiotics that contribute to surgical site infections (SSIs) in our group of surgical patients, using metagenomic and in-vitro techniques^{6–8}. Findings will guide implementation of new protocols of pre-operative antibiotic prophylaxis.

Scientific references

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3. Dumonceau, J.-M. et al. Biliary stents: models and methods for endoscopic stenting. *Endoscopy* 43, 617–626 (2011).
4. Gianotti, L. et al. Consequences of Increases in Antibiotic Resistance Pattern on Outcome of Pancreatic Resection for Cancer. *J Gastrointest Surg* 21, 1650–1657 (2017).
5. Gavazzi, F. et al. Role of preoperative biliary stents, bile contamination and antibiotic prophylaxis in surgical site infections after pancreaticoduodenectomy. *Bmc Gastroenterol* 16, 43 (2016).



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Type of contract

Contract for continuative and coordinated service of at least € 26.000 activated by Fondazione. This sum is subject to IRPEF income tax.

Contratto collaborazione coordinata e continuativa (cococo) pari ad almeno € 26.000 annui lordi attivato da Fondazione Humanitas. Importo soggetto a tassazione IRPEF.