

### **Perioperative Management of Patients with Pancreatic Cancer – the ERAS Protocols**

Răzvan A. Ciocan<sup>1</sup>, Andra Ciocan<sup>2,3</sup>, Florin V. Zaharie<sup>2,3</sup>, Călin Popa<sup>2,3</sup>, Diana Schlanger<sup>2,3</sup>, Alexandru Alexa<sup>3,4</sup>, Daniela Ionescu<sup>3,4</sup>, Nadim Al Hajjar<sup>2,3</sup>

<sup>1</sup>Department of Medical Skills, Iuliu Hațieganu University of Medicine and Pharmacy Cluj-Napoca, Romania

Department of Surgery, Iuliu Hațieganu University of Medicine and Pharmacy Cluj-Napoca, Romania

<sup>2</sup>Department of Surgery III, Iuliu Hațieganu University of Medicine and Pharmacy Cluj-Napoca, Romania

<sup>3</sup>Prof. Dr. Octavian Fodor Regional Institute of Gastroenterology and Hepatology Cluj-Napoca, Romania

<sup>4</sup>Department of Anesthesia and Intensive Care I, Iuliu Hațieganu University of Medicine and Pharmacy Cluj-Napoca, Romania

### **Abstract**

*Background:* Pancreatic cancer represents the fifth leading cause of death in industrialized countries. The prognosis is reserved, surgical resection being the only curative treatment, but the complications associated bear important impact on the patients' survival, prognosis, and quality of life. The ERAS protocols come to meet these shortcomings for enhanced recovery after major pancreatic resections.

*Material and method:* A systematic review was performed following the guidelines outlined by The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement. Original articles published in the online databases Pubmed (Medline), Embase and Cochrane since 2017 until 2022 were screened after using specific keywords.

*Results:* A total of 252 studies was obtained by searching through online databases. Following the exclusion criteria, we included 7 studies in the systematic review.

*Conclusions:* The ERAS protocols are safe to be applied in the common practice. They are efficient in the perioperative management of patients undergoing pancreatic resections. They can further decrease hospitalization stay, promote better recovery of gastrointestinal function, and speed up postoperative recovery.

**Key words:** enhanced recovery, guidelines, pancreatoduodenectomy, perioperative management, prognosis