3 - Clinical Anatomy

OC-072 - (23940) - ANATOMICAL VARIATIONS OF MAJOR VESSELS IN GASTRIC ONCOLOGICAL RESECTION: A STUDY OF 125 SEQUENTIAL PATIENTS

D. Dionisio (Portugal)[1]; M. Ferreira (Portugal)[1]; A. Andrade (Portugal)[1]; C. Neves Marques (Portugal)[1]; A. Pupo (Portugal)[1]; R. Barybine (Portugal)[1]; V. Vasconcelos (Portugal)[1]; H. Pinto Marques (Portugal)[1]

1 - ULS São José

Daniela Dionisio
Lisbon

Madalena Ferreira
Lisbon

Afonso Andrade
Lisbon

Cláudia Neves Marques
Lisbon

Alexandra Pupo
Lisbon

Rouslan Barybine
Lisbon

Vasco Vasconcelos
Lisbon

Hugo Pinto Marques
Lisbon

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Anatomical variations in upper abdominal vascular structures pose significant surgical challenges during gastric cancer resections, increasing risks such as vascular injury, haemorrhage, and inadequate lymphadenectomy. Variations in the celiac trunk, its branches, and superior mesenteric artery necessitate surgical technique adjustments to ensure oncological safety and minimise complications. This study assesses the prevalence and surgical impact of these variations.

We retrospectively evaluated preoperative CT angiography scans from 125 consecutive gastric cancer patients undergoing antrectomy, atypical, subtotal, or total gastrectomy. Three reviewers independently assessed the scans, reaching consensus on anatomical variations of the celiac trunk and its main branches: common hepatic, left gastric, and splenic arteries.
Anatomical variations were found in 16% of cases. The most common was Michel type II (left hepatic artery originating from left gastric artery) in 12%, followed by type III (replaced right hepatic artery arising from the superior mesenteric artery) in 3%, and type V (accessory left hepatic artery from left gastric artery) in 1%.
Vascular anatomical variations significantly affect surgical complexity, intraoperative risk, and postoperative outcomes in gastric oncological resections with lymphadenectomy. Preoperative CT angiography mapping is crucial to anticipate vascular anomalies, refine surgical approaches, and improve patient safety. Intraoperative vigilance, precise dissection, and adherence to preoperative vascular assessment protocols are essential to minimise complications, optimise oncological results, and reduce perioperative morbidity.

Palavras-chave : gastrectomy, lymphadenectomy, vascular anatomy