

Official Journal of the Hellenic Surgical Society

Hellenic *Journal of* Surgery





Hellenic Journal of Surgery

Official Journal of the Hellenic Surgical Society

Volume 94 Supplement 1 2024

ISSN: 0018-0092 | e-ISSN: 1868-8845

Editor - in - Chief

Nikolaos I. Nikiteas, Athens, Greece

Co - Editor

Dimitrios Dimitroulis, Athens, Greece

Associate Editors

Stylios Kykalos, Athens, Greece

Nikolaos Machairas, Athens, Greece

Dimitrios Schizas, Athens, Greece

Gerasimos Tsourouflis, Athens, Greece

Managing Editor

Maximos Frountzas, Athens, Greece

Advisory Board

Stamatios Angelopoulos, Thessaloniki, Greece

Nikolaos Arkadopoulos, Athens, Greece

Eelco de Bree, Heraklion, Greece

Emmanouil Chrysos, Heraklion, Greece

Eleni I. Efraimidou, Alexandroupolis, Greece

Evangellos Felekouras, Athens, Greece

Ioannis Galanis, Thessaloniki, Greece

Georgios Glantzounis, Ioannina, Greece

Apostolos Kamparoudis, Thessaloniki, Greece

Anastasios Karayiannakis, Alexandroupolis, Greece

Isaak Kesisoglou, Thessaloniki, Greece

Christos Klonaris, Athens, Greece

Manousos Konstadoulakis, Athens, Greece

Konstantinos Koutsopoulos, Rhodes Island, Greece

Ioannis Maroulis, Patras, Greece

Evangellos Menaekos, Athens, Greece

Antonios Michalopoulos, Thessaloniki, Greece

Dionysios Mitropoulos, Athens, Greece

Michail Mitsis, Ioannina, Greece

Vassilios Papadopoulos, Thessaloniki, Greece

Basileios Papaziogas, Thessaloniki, Greece

Despoina N. Perrea, Athens, Greece

Emmanouil Pikoulis, Athens, Greece

Michail Pitiakoudis, Alexandroupolis, Greece

Alexandros Polychronidis, Alexandroupolis, Greece

Nikolaos Roukounakis, Athens, Greece

Spiros Stavrianos, Athens, Greece

Konstantinos Tepetes, Larisa, Greece

Dimitrios Theodorou, Athens, Greece

Konstantinos G. Toutouzas, Athens, Greece

Georgios Tsoulfas, Thessaloniki, Greece

Georgios Tzouvaras, Larisa, Greece

Dimitrios Zacharoulis, Larisa, Greece

Georgios K. Zografos, Athens, Greece

Georgios N. Zografos, Athens, Greece

OWNER: HELLENIC SURGICAL SOCIETY, 1 Artis St., 115 23 Athens, Greece

SECRETARIAT: e-mail: editorialoffice@hjs.gr

PRODUCTION: TECHNOGRAMMAmed, 380, Messogion Ave., 153 41 Athens - Greece, Tel.: +30 210 6000643, e-mail: info@technogramma.gr



Hellenic Journal of Surgery

Official Journal of the Hellenic Surgical Society

Volume 94 Supplement 1 2024

ISSN: 0018-0092 | e-ISSN: 1868-8845

Editorial Board

- Konstantinos Alexiou**, Athens, Greece
Fotios Archontovasilis, Athens, Greece
Nikolaos Charalampakis, Athens, Greece
Grigorios Chatzimavroudis, Thessaloniki, Greece
Dimitrios Damaskos, Edinburgh, UK
Dionysios Dellaportas, Athens, Greece
Vasileios Drakopoulos, Athens, Greece
Dimitrios Filippou, Athens, Greece
Zoe Garoufalia, Florida, Miami, USA
Maria Gazouli, Athens, Greece
Orestis Ioannidis, Thessaloniki, Greece
Christos Iordanou, Piraeus, Greece
Meletios Kanakis, Athens, Greece
Emmanouil Kapetanakis, Athens, Greece
Michail V. Karamouzis, Athens, Greece
Nikolaos Karydis, Patras, Greece
Athanasios Katsargyris, Athens, Greece
Aristotelis Kechagias, Hämeenlinna, Finland
Christos Kontovounisios, London, UK
Ioannis D. Kostakis, London, UK
Ioannis Koutelidakis, Thessaloniki, Greece
Sofoklis Lanitis, Athens, Greece
Konstantinos Lasithiotakis, Heraklion, Greece
Ioannis I. Lazaridis, Zurich-Schlieren, Switzerland
Andreas Lazaris, Athens, Greece
Georgios Lianos, Ioannina, Greece
Evangelos Lolis, Volos, Greece
Orestis Lyros, Leipzig, Germany
Styliani Mantziari, Lausanne, Switzerland
Konstantinos Mavrantonis, Athens, Greece
Evangelos Messaris, Boston, USA
Adamantios Michalinos, Nicosia, Cyprus
Nikolaos V. Michalopoulos, Athens, Greece
Konstantinos S. Mylonas, Athens, Greece
Konstantinos Nastos, Athens, Greece
Dimitrios Ntourakis, Nicosia, Cyprus
Dimitrios Papaconstantinou, Athens, Greece
Nikolaos Ptohis, Athens, Greece
Dimitrios A. Raptis, London, UK
Ioannis Rouvelas, Stockholm, Sweden
Nikolaos Sikalias, Kalamata, Greece
Georgios C. Sotiropoulos, Athens, Greece
Paris P. Tekkis, London, UK
Georgios Theodoropoulos, Athens, Greece
Maria Tolia, Heraklion, Greece
Diamantis I. Tsilimigras, Ohio, USA
Theodoros Troupis, Athens, Greece
Alexandra Tsaroucha, Alexandroupolis, Greece
Michail Vailas, Athens, Greece
Kyriakos Vamvakidis, Athens, Greece
Chrysovalantis Vergadis, Athens, Greece



Hellenic Journal of Surgery

Official Journal of the Hellenic Surgical Society

Volume 94 Supplement 1 2024

ISSN: 0018-0092 | e-ISSN: 1868-8845

CONTENTS

Abstracts of the 16th Hellenic-Cypriot Surgical Congress

Perioperative factors determining outcomes after pancreaticoduodenectomy: Results from a multivariate cohort analysis	6
S. Parasyris, V. Ntella, T. Sidiropoulos, S.A. Maragkos, N. Pantazis, P. Patapis, P. Matsota, P. Vassiliu, V. Smyrniotis, N. Arkadopoulos	
Evaluation of HDAC-2 expression in colorectal cancer: An Original Study	7
N. Garpis, A. Nonni, G. Kouraklis, D. Dimitroulis, E. Antoniou, E. Efremidou, D. Papoutsas, K. Fousekis, K. Kontzoglou, C. Damaskos	
Incidental finding of malignancy in liver resection specimen during liver transplantation – The experience of a transplant center	8
K. Giannakopoulos, P. Dorovinis, M. Keramida, A. Loizou, N. Machairas, A. Angelis, S. Kykalos, S. Sakellariou, S. Vernadakis, D. Mantas, G. Sotiropoulos	
Expression of tissue remodeling and inflammation - Related factors during the wound healing process in humans	9
D. Vardakostas, A. Moustogiannis, A. Philippou, F. Stavratz, G. Kouraklis, M. Koutsilieris, D. Mantas	
The effect of the enhanced recovery after surgery (ERAS) protocol on general health perception of the patients undergoing colectomy or low anterior resection	10
E. Makrinika, M. Keramida, D. Mantas	
Preliminary results of an ongoing prospective randomised study of laparoscopic and retroperitoneoscopic adrenalectomy for benign adrenal tumours	11
C. Aggeli, K. Pateas, N. Kikas, D. Kapnias, V. Theocharidis, D. Stratigakos, K. Divaris, C. Pahi, V. Moustakaki, I. Resta, D. Sambanis, G. Zografos	
Abdominal hernia rehabilitation using the fasciotens hernia device	12
M. Vardas, A.A. Giatzaki, Z. Karafoulidou, T. Margetousakis, E. Troullinakis, N. Moudatsakis	
Emergency vs elective surgery for colorectal cancer: Oncological outcomes	13
E. Dontsiou, G. Zacharioudakis, E. Chatzigriva, E. Bratko, E. Symeonidou, A. Fouza, S. Tsaramanidis, I. Gkoutziotis, P. Petras, K. Ballas	
Modified dor fundoplication in achalasia patients: Long-term outcomes from a high-volume centre	14
E. Kitsou, K. Saliaris, A. Triantafyllou, I. Karikis, S. Katsila, K. Kakounis, A. Theodorou, V. Xiromeritou, T. Triantafyllou, D. Theodorou	



Hellenic Journal of Surgery

Official Journal of the Hellenic Surgical Society

Volume 94 Supplement 1 2024

ISSN: 0018-0092 | e-ISSN: 1868-8845

CONTENTS

Early results from the use of an innovative vertical fascial traction system for the management of patients with open abdomen	15
O. Ioannidis, P. Charitidis, A. Brenta, G. Gemousakakis, K. Siozos, S. Symeonidis, S. Bitsianis, N. Ouzounidis, E. Kotidis, S. Angelopoulos	
Intraoperative flow cytometry: A new study method and prognostic tool in orthocolic cancer	16
V. Georvasili, G. Markopoulos, M. Mitsis, E. Lampri, G. Lianos, G. Vartholomatos, C. Bali	
The impact of quercetin on non-alcoholic fatty liver disease progression and autophagy modulation: An Experimental Model	17
I. Katsaros, M. Sotiropoulou, M. Vailas, F. Papachristou, P. Papakyriakopoulou, G. Valsami, A. Tsaroucha, D. Schizas	
Techniques for laparoscopic splenectomy	18
K. Neokleous, L. Kourtidis, T. Choratta, A. Kalligas, D. Ntrikou, M. Lazaris, D. Margaritis, P. Dikeakos, E. Kouroumpas, G. Ayiomamitis	
The role of laparoscopic extended mesenteric excision and kono-s anastomosis in Crohn's disease of terminal ileum. Our experience	19
P. Dikeakos, A. Kalligas, T. Choratta, K. Neokleous, L. Kourtidis, E. Markaki, M. Karamanis, E. Kouroumpas, C. Iordanou, G. Ayiomamitis	
Laparoscopic management of large inguinoscrotal hernias: A modern minimally invasive technique in a public health surgical department	20
D. Ntrikou, D. Margaritis, M. Karamanis, E. Markaki, K. Spyridaki, M. Tsvigouli, K. Neokleous, L. Kourtidis, P. Dikeakos, G. Ayiomamitis	
The use of a closed-end Picc-Port as an intravenous access device in oncology patients: The first feasibility study worldwide	21
O. Ioannidis, P. Charitidis, A. Bourtzinakou, G. Gemousakakis, S. Simeonidis, S. Bitsianis, V. Foutsitzis, M. Pramateftakis, I. Mantzoros, S. Angelopoulos	
Esophageal cancer – Surgical experience of our clinic	22
K. Isaakidis, S. Tsaramanidis, A. Morsi-Gerogiannis, M. Patoulia, I. Gkoutziotis, P. Petras, K. Mpallas	
Development of gastric adenocarcinoma at the exit site of a percutaneous endoscopic gastrostomy: A case report	23
S. Aitsidou, F. Kazantzidis, M. Valtou, Z. Tatsiou, I. Triantafyllidis	
Butyrylcholinesterase (BChE) levels correlate with surgical site infection risk and severity after colorectal surgery: A prospective single-center study	24
F. Mulita, C. Svoronos, I. Maroulis, G. Verras	



Hellenic *Journal of* Surgery

Official Journal of the Hellenic Surgical Society

Volume 94 Supplement 1 2024

ISSN: 0018-0092 | e-ISSN: 1868-8845

C O N T E N T S

Morbidity and mortality of major surgical operations in the third age	25
E. Fotopoulou, M. Keramida, D. Mantas	
Large Perineal Hernia	26
E.E. Dimou, O. Tsiboukidi, S. Adamopoulos, K. Petropoulos, V. Karanassiou, A. Kainourgiaki, D. Mathiou, M.M. Kosiori, E. Xatzopoulos, A. Roubou, A. Karaklas	
Stromal tumours - A single center retrospective study	27
K. Toutouzas, N. Intzes, I. Stefanou, T. Triantafyllou, D. Vouros, M. Frountzas, D. Stefanoudakis, S. Patsouris, S. Volteas, D. Theodorou	
Duodenal neoplasms - A single-center retrospective study	28
K. Toutouzas, N. Intzes, T. Triantafyllou, D. Vouros, C. Glava, M. Frountzas, E. Kitsou, D. Theodorou	
Case report: Thoracoabdominal penetrating trauma	29
P. Georgiou, C. Bartsokas, C. Thrasyvoulou	
Management of trauma patient with simultaneous blunt and penetrating injuries	30
P. Patias, K.M. Liosis, E. Papadima, A.I. Melani, E. Stavropoulou, S. Mourtarakos, K. Koumarelas, I. Anastasiadis, I. Massalis	

Perioperative factors determining outcomes after pancreaticoduodenectomy: Results from a multivariate cohort analysis

S. Parasyris¹, V. Ntella², T. Sidiropoulos¹, S.A. Maragos², N. Pantazis³, P. Patapis⁴,
P. Matsota⁵, P. Vassiliu¹, V. Smyrniotis¹, N. Arkadopoulos¹

¹4th Department of Surgery, Attikon University General Hospital, National and Kapodistrian University of Athens, Greece, ²Medical School, National and Kapodistrian University of Athens, Greece, ³Department of Hygiene, Epidemiology and Medical Statistics, Medical School, National and Kapodistrian University of Athens, Greece, ⁴3rd Department of Surgery, Attikon University General Hospital, National and Kapodistrian University of Athens, Greece, ⁵2nd Department of Anesthesiology, Attikon University General Hospital, National and Kapodistrian University of Athens, Greece

Introduction: Despite technical advances in recent decades and a decrease in hospital mortality (<5%), pancreaticoduodenectomy (PD) is still associated with major postoperative complications even in high volume centers. This study was designed to assess the effect of a modified reconstruction technique and other perioperative factors on postoperative morbidity and mortality.

Methods: A cohort study of consecutive patients (n=218) undergoing PD between January 2010 and December 2019 was conducted at Attikon University Hospital. Several variables were studied, such as patient demographic data, medical history, tumour markers and pathology, perioperative parameters, hospitalisation days, postoperative complications, thirty-day-survival, postoperative mortality and overall survival.

Results: In this cohort, 123 patients (group A) underwent a modified reconstruction after a pylorus-preserving PD which consisted of gastro- and pancreatic-jejunosomy on the same loop and an isolated hepaticojejunostomy on another loop. In group B, 95 patients underwent the standard reconstruction. Median age was 67 years, ranging from 25 to 89 years old. Group A had significantly lower rates of pancreatic fistula (4.9% vs 28.4%) compared to group B, lower delayed gastric emptying (7.3% vs 42.1%), lower postoperative haemorrhage (3.3% vs 20%), lower intensive care unit admission (8.1% vs 18.9%), lower overall morbidity (Clavien-Dindo>2: 14.7% vs 42%), lower perioperative mortality (4.1% vs 14.7%) and shorter hospitalisation stay (11 days vs 20 days). However, no difference was noted regarding median survival (35 months vs 30 months).

Conclusion: In the present single center series, a modified reconstruction after PD appears to be associated with improved postoperative outcomes; thus, deserving further evaluation in larger multi-center trials.

Evaluation of HDAC-2 expression in colorectal cancer: An Original Study

N. Garpis^{1,2}, A. Nonni³, G. Kouraklis⁴, D. Dimitroulis⁵, E. Antoniou^{4,6}, E. Efremidou⁷, D. Papoutsas¹, K. Fousekis⁸, K. Kontzoglou^{2,5}, C. Damaskos^{2,9}

¹Department of Surgery, Sotiria Hospital, Athens, Greece, ²N.S. Christeas Laboratory of Experimental Surgery and Surgical Research, Medical School, National and Kapodistrian University of Athens, Athens, Greece, ³First Department of Pathology, Medical School, National and Kapodistrian University of Athens, Athens, Greece, ⁴Medical School, National and Kapodistrian University of Athens, Athens, Greece, ⁵Second Department of Propaedeutic Surgery, Laiko General Hospital, Medical School, National and Kapodistrian University of Athens, Athens, Greece, ⁶"Iaso" Medical Clinic, Athens, Greece, ⁷First Department of Surgery, Medical School of Democritus University of Thrace, University Hospital of Alexandroupolis, Greece, ⁸Renal Transplantation Unit, Laiko General Hospital, Athens, Greece, ⁹Emergency Unit, Laiko General Hospital, Athens, Greece

Introduction: Colorectal cancer (CRC) is the third most commonly diagnosed cancer and the third leading cause of cancer-related deaths in both men and women. In addition to environmental and hereditary factors, genetic and epigenetic changes are key contributors to CRC pathogenesis. Environmental factors may cause genetic and epigenetic alterations, which could lead to cancer development. Beyond their role in cancer initiation, epigenetic changes, particularly histone acetylation mediated by histone deacetylases (HDAC), might play a significant role in CRC progression. Overexpression of HDAC has been reported in CRC and precancerous lesions, highlighting their potential as therapeutic targets. HDAC inhibitors (HDACI) represent a promising class of anticancer therapies although their efficacy in CRC treatment remains underexplored. The aim of this study is to assess HDAC-2 expression in CRC and investigate the potential therapeutic impact of HDAC inhibitors (HDACI).

Method: Seventy-seven tissue samples from patients with CRC were examined. Immunohistochemical staining for HDAC-2 was performed and the expression was analysed regarding clinicopathological parameters, such as age, tumour stage, as well as recurrence and survival rates.

Results: Increased HDAC-2 expression was significantly associated with younger patient age and earlier disease recurrence. Additionally, higher HDAC-2 expression was linked to slightly reduced overall survival.

Conclusion: These findings emphasise the crucial role of HDAC-2 in CRC and suggest that targeting HDAC with HDACI could be an effective therapeutic approach. This study highlights the need for further research for better understanding of HDAC function in CRC and exploration of the therapeutic potential of HDACIs for specific patient groups

Incidental finding of malignancy in liver resection specimen during liver transplantation – The experience of a transplant center

K. Giannakopoulos¹, P. Dorovinis¹, M. Keramida¹, A. Loizou¹, N. Machairas¹,
A. Angelis¹, S. Kykalos¹, S. Sakellariou², S. Vernadakis³, D. Mantas¹, G. Sotiropoulos^{1,4}

¹Second Department of Propaedeutic Surgery, Medical School, National and Kapodistrian University of Athens, Athens,

²First Department of Pathology, School of Medicine, National and Kapodistrian University of Athens, Athens, ³Renal Transplantation Unit, Laiko General Hospital, Athens, ⁴Liver Transplantation Unit, Laiko General Hospital, Athens

Introduction: Orthotopic liver transplantation (OLT) is the only curative treatment for patients with end-stage cirrhosis, a major risk factor for the development of liver cancer. The aim of the present study was to assess the frequency of incidental neoplastic findings in the histopathological examination of hepatectomy specimens from patients undergoing OLT.

Method: We analysed data from a prospectively maintained database starting in 2018. Histological examinations of hepatectomy specimens were reviewed and unexpected findings were documented. The initial surgical indication was also assessed.

Results: Pathology reports from 67 patients were studied. In six patients, the cause of cirrhosis was revised. In eight cases (11.94%), previously undetected malignancies were found, including hepatocellular carcinoma (HCC) (62.5%), intrahepatic cholangiocarcinoma (12.5%), combined cholangiocarcinoma and HCC (12.5%), as well as mixed hepatocellular-cholangiocarcinoma (12.5%). The most common underlying liver disease was alcohol-related cirrhosis. The median interval between the last preoperative imaging and the transplantation was 92 days (range: 53-315 days).

Conclusion: The incidence of unexpected malignancies in explanted liver specimens was 11.94%, aligning with published data. Despite regular imaging surveillance of patients on the OLT waiting list, a significant proportion of liver cancers are mainly identified postoperatively.

Expression of tissue remodeling and inflammation - Related factors during the wound healing process in humans

D. Vardakostas¹, A. Moustogiannis², A. Philippou², F. Stavratz², G. Kouraklis¹, M. Koutsilieris¹, D. Mantas¹

¹Second Department of Propaedeutic Surgery, "Laiko" General Hospital, Medical School, National and Kapodistrian University of Athens, 11527 Athens, Greece, ²Department of Physiology, Medical School, National and Kapodistrian University of Athens, Athens, Greece

Introduction: There is a growing interest in the research of wound healing mechanisms worldwide. Particular attention has been paid to study the expression of tissue remodelling- and inflammation – related factors. Herein, we investigate the expression patterns of transforming growth factor beta-1 (TGF- β 1), interleukin-6 (IL-6), tumour necrosis factor-alpha (TNF-a), urokinase-type plasminogen activator (uPA), uPA-receptor, matrix metalloproteinase-2 (MMP-2) and MMP-9 through the four phases of normal wound healing process in humans.

Method: Twenty-two individuals presenting with pilonidal sinus underwent surgical excision and the wound was left open for secondary healing. Sequential biopsies were collected on postoperative day 0, 2, 9 and 14. The expression levels of the proteins were evaluated using reverse transcription – quantitative PCR.

Results: The results showed statistically significant differences in the expressions of the factors during wound healing ($p < 0.05$). TGF- β 1 increased on day two and nine. TNF-a increased on day two and then decreased on day nine. Il-6 was increased on day two and was dropped on days nine and 14. uPa mRNA increased up to day nine but its receptor exhibited a high expression throughout the observation time. Finally, MMP-2 mRNA expression increased on day two and declined on days nine and 14 while MMP-9 was highly expressed until the 14th postoperative day.

Conclusion: Each factor investigated in this study has an important and distinct role in the normal wound repair procedure. Further investigation is required to evaluate the tissue- specific regulation of these factors and their potential use as therapeutic targets or prognostic biomarkers in wound healing.

The effect of the enhanced recovery after surgery (ERAS) protocol on general health perception of the patients undergoing colectomy or low anterior resection

E. Makrinika, M. Keramida, D. Mantas

Second Department of Propaedeutic Surgery, "Laiko" General Hospital, Medical School, National and Kapodistrian University of Athens, Greece

Introduction: The present study investigated the effect of the enhanced recovery after surgery (ERAS) protocol in patients undergoing colectomy or low anterior resection on their own perception of their general health.

Method: A prospective study was performed. Thirty-six patients participated: 19 from Sismanoglio Hospital of Athens, where ERAS protocol is implemented and 17 from Laiko Hospital, where it is not. The patients filled the health-related quality of life SF-36 questionnaire at fixed time intervals up to 12 months after the procedure. The general health domain was analysed.

Results: Preoperatively, the Laiko patients assess their general health better (mean 3.3824, SD 0.31049) than those of Sismanoglio (mean 3.1491, SD 0.19950). On the contrary, Sismanoglio patients evaluate their general health better (mean 2.9123, SD 0.33040) than Laiko patients (mean 2.5833, SD 0.16102) postoperatively. Mean differences of health condition estimation were statistically significant at all stages with $p < 0.001$.

Conclusion: The implementation of ERAS has a positive effect on patients' own perception of general health.

Preliminary results of an ongoing prospective randomised study of laparoscopic and retroperitoneoscopic adrenalectomy for benign adrenal tumours

C. Aggeli, K. Pateas, N. Kikas, D. Kapnias, V. Theocharidis, D. Stratigakos, K. Divaris, C. Pahis, V. Moustakaki, I. Resta, D. Sambanis, G. Zografos

First Surgical Department, "G. Gennimatas" Athens General Hospital

Introduction: The aim of the present study was the comparison of laparoscopic and retroperitoneoscopic approaches in benign adrenal tumours through a randomised prospective study of patients in our surgical department. All patients were operated on by the same surgical team.

Method: A comparison was made between the results of 30 laparoscopic and 30 retroperitoneoscopic adrenalectomies. Indications included benign adrenal tumours, non-secreting adenomas, Cushing's syndrome, Conn's syndrome and pheochromocytomas ranging in size from 3.5 to 5.5 cm. Both right and left adrenalectomies were performed. Differences in patient positioning, port placement, tumour approach and identification of the veins were described. The duration of surgery, need for analgesics, aesthetic outcomes and length of hospital stay were compared.

Results: Patient positioning was similar for both techniques. Vessel identification showed some differences depending on the approach used. The duration of surgery ranged from 40 to 80 minutes for both techniques. Postoperative recovery was uneventful. The need for analgesics appeared to be lower in patients approached with the retroperitoneoscopic technique, as well as satisfaction with the aesthetic outcome. All patients were discharged on the first or second postoperative day.

Conclusion: Retroperitoneoscopic approach is the preferred technique for benign adrenal tumours up to 6 cm. For tumours sized 6 to 8 cm, the decision concerning surgical approach is related to the experience of the surgical team, as well as the malignant potential. Randomised prospective studies are needed to draw conclusions for tumours larger than 6 cm.

Abdominal hernia rehabilitation using the fasciotens hernia device

M. Vardas, A.A. Giatzaki, Z. Karafoulidou, T. Margetousakis,
E. Troullinakis, N. Moudatsakis

Agios Nikolaos General Hospital, Crete, Greece

Introduction: The repair of large, complex abdominal wall hernias is a challenge for surgeons. While closing the posterior sheath of the rectus abdominis is feasible using the posterior component separation technique, reconstructing the linea alba in large ventral hernias is particularly difficult. In such cases, the use of the Fasciotens hernia device allows for the desired outcome. The present study aimed to present the surgical technique and our initial experience with this method.

Method: We treated two patients with complex postoperative ventral hernias using this technique. The first patient was a 44-year-old woman with a complex M3-4 hernia and a defect of 12 cm. The second patient was a 50-year-old man with a complex M2-3 hernia and a defect of 14 cm. In both patients, a retro-rectus mesh was placed, and the anterior abdominal wall was approximated using the Fasciotens hernia device. The closure was achieved with continuous suturing.

Results: Both patients are being followed up every six months with excellent outcomes.

Conclusion: Fasciotens is a demanding and innovative technique that offers an alternative solution for reconstructing the linea alba while avoiding the complications associated with anterior component separation.

Emergency vs elective surgery for colorectal cancer: Oncological outcomes

E. Dontsiou, G. Zacharioudakis, E. Chatzigriva, E. Bratko, E. Symeonidou, A. Fouza, S. Tsaramanidis, I. Gkoutziotis, P. Petras, K. Ballas

Fifth Department of Surgery, Aristotle University of Thessaloniki, Ippokratia General Hospital, Thessaloniki, Greece

Introduction: Up to 30% of colorectal cancer (CRC) patients present with complications such as bowel obstruction, perforation or bleeding. These complications often necessitate emergency resection. This study aims to compare the oncological outcomes regarding the quality of the histological specimen between emergency and elective surgery for CRC in our department.

Method: Over a period of 15 years (2010-2024), 764 patients were included. Out of them, 251 were part of Group A (emergency surgery group), while 513 were in Group B (elective surgery group). The key parameters of the study included the length of the resected segment of the bowel, the margins, the length of the vascular pedicle and the number of removed lymph nodes (more or less than 12). Additionally, the quality of histological specimens was assessed depending on the surgeon's specialisation in colorectal surgery, as well as the time of day (day/night) when the surgery was performed.

Results: The quality of the histological specimens regarding the aforementioned parameters was statistically similar for both groups. However, it was significantly influenced by the surgeon's level of expertise. The time of surgery presented no statistically significant differences between the two groups. On the contrary, the morbidity and mortality rate was affected by the emergency indication of the procedure.

Conclusion: Based on the histological specimens and subsequent findings, the application of the principles of surgical oncology is feasible in patients who require emergency surgical interventions if proper resection is performed by an expert surgeon.

Modified dor fundoplication in achalasia patients: Long-term outcomes from a high-volume centre

E. Kitsou¹, K. Saliaris¹, A. Triantafyllou¹, I. Karikis¹, S. Katsila², K. Kakounis²,
A. Theodorou¹, V. Xiromeritou², T. Triantafyllou¹, D. Theodorou¹

¹Department of Surgery, Hippocratio General Hospital of Athens, University of Athens, Athens, Greece, ²Department of Gastroenterology, Hippocratio General Hospital of Athens, Athens, Greece

Introduction: Heller myotomy combined with Dor fundoplication remains the gold standard in the treatment of achalasia. Dor fundoplication serves as a floppy partial fundoplication, which reduces the postoperative gastroesophageal reflux disease from 33% to 9%. In this study, we propose a modified, "3-stitch" floppier anterior wrap in order to prevent recurrence of dysphagia due to outflow obstruction from oesophagus.

Method: The prospectively collected surgical achalasia database of our department was retrieved. All patients had preoperative manometry study and were operated by the same surgical team. Data regarding preoperative Eckardt, GERD and Quality of Life assessment scores were collected. Patients attended regular follow-up appointments. Those with abnormal Eckardt and GERD scores were subjected to objective testing using manometry and 24h impedance pHmetry, postoperatively.

Results: A total of 118 patients with achalasia were subjected to Heller myotomy and modified Dor fundoplication from 01/2014 to 12/2020. 97 patients completed the follow-up appointments. Median follow-up was 72 months (28-120 months). 97% of patients reported a positive influence in their quality of life and did not regret undergoing surgery. 7/97 (7.2%) presented with an abnormal Eckardt score and 5/97 (5.2%) patients demonstrated an abnormal GERD score. Objective testing results with manometry and pH-studies of patients with abnormal scores will be completed within the next two months.

Conclusion: Our modified Dor fundoplication after Heller myotomy is a safe and efficient surgical method for treating achalasia. Long-term follow-up suggests significant and long-lasting improvement in Quality of Life and very low incidence of symptom relapse.

Early results from the use of an innovative vertical fascial traction system for the management of patients with open abdomen

O. Ioannidis, P. Charitidis, A. Brenta, G. Gemousakakis, K. Siozos, S. Symeonidis, S. Bitsianis, N. Ouzounidis, E. Kotidis, S. Angelopoulos

Fourth Department of Surgery, "G. Papanikolaou" General Hospital of Thessaloniki, School of Medicine, Faculty of Health Science, Aristotle University of Thessaloniki, Greece

Introduction: The combination of negative pressure wound therapy (NPWT) with dynamic fascial traction is the preferred method for the temporary closure of the open abdomen (OA). However, this method still requires further fascial approximation and patient's return to the operating room. The aim of this study is to present our clinic's experience using a vertical fascial traction system for the management of open abdomen and its early closure.

Method: This is a prospective registry of patients in whom the system was applied from May 2023 to the present.

Results: Eleven patients were enrolled over the last 18 months, including five women and six men, with an average age of 62.2 years. Indications for open abdomen were peritonitis, intra-abdominal haemorrhage and abdominal compartment syndrome. No system was applied in the damage-control initial operation. In subsequent operations, the system was applied due to inability to close the abdominal wall, with an average fascial gap of approximately 16.4 cm. Patients underwent an average of 2.2 dressing changes and the system was used for six days on average. Abdominal closure was achieved in nine out of 11 patients: in six with primary midline suture and in three with mesh. Two patients died before closure could be performed.

Conclusion: The key principle of the vertical fascial traction system is the vertical traction of the fascia of the rectus abdominis muscle using an external device anchored to the pelvis and thorax, aiming to increase abdominal compartment volume and reduce intra-abdominal pressure.

Intraoperative flow cytometry: A new study method and prognostic tool in colorectal cancer

V. Georvasili¹, G. Markopoulos², M. Mitsis¹, E. Lampri³, G. Lianos¹,
G. Vartholomatos², C. Bali¹

¹Department of Surgery, University Hospital of Ioannina, Greece, ²Unit of Molecular Biology, University Hospital of Ioannina, Greece, ³Department of Pathology, University Hospital of Ioannina, Greece

Introduction: Intraoperative flow cytometry (iFC) is an innovative method of evaluating tumours and resection margins. The purpose of this study is to evaluate iFC in the identification of normal and cancerous cells in patients with colorectal cancer (CRC) and to correlate individual cytometric parameters with patient survival and histological characteristics of tumours.

Method: A total of 106 patients with colorectal cancer were studied prospectively. Intraoperatively, a sample of fresh normal and cancerous tissue was retrieved, which was directly analysed blindly by flow cytometry with the aim of initially defining the cancerous sample and then determining the individual cytometric parameters (DNA & Tumour Index). Subsequently, the cytometric findings were correlated with the histological characteristics of the tumours, as well as with the survival of the patients.

Results: iFC was able to accurately (~91%) distinguish the presence of cancer cells (82.2% sensitivity and 99.9% specificity) in all colorectal cancer patients. In the subpopulation of rectal cancer patients, the accuracy of the method drops to 88% for those who did not receive neoadjuvant therapy and to 79% for those who did. Tumour index (TI) was positively correlated with the degree of response to neoadjuvant therapy. Patients with high TI had a statistically significant reduction in survival.

Conclusion: Regarding colorectal cancer, iFC is a useful adjunct method for tumour cell identification and may be a useful tool in cases where resection margins are important. Furthermore, TI could be utilised as a predictive biomarker of tumour response to neoadjuvant treatment and survival of resectable CRC patients.

The impact of quercetin on non-alcoholic fatty liver disease progression and autophagy modulation: An Experimental Model

I. Katsaros¹, M. Sotiropoulou¹, M. Vailas¹, F. Papachristou², P. Papakyriakopoulou³, G. Valsami³, A. Tsaroucha⁴, D. Schizas¹

¹First Department of Surgery, National and Kapodistrian University of Athens, Laikon General Hospital, Athens, Greece, ²Laboratory of Experimental Surgery, Democritus University of Thrace, Alexandroupoli, Greece, ³Laboratory of Biopharmaceutics-Pharmacokinetics, Department of Pharmacy, National and Kapodistrian University of Athens, Athens, Greece, ⁴Laboratory of Bioethics, Democritus University of Thrace, Alexandroupoli, Greece

Introduction: Non-alcoholic fatty liver disease (NAFLD) is a prevalent health issue marked by excessive fat accumulation in the liver without a history of significant alcohol use. This study aimed to evaluate the effects of quercetin on NAFLD and assess the role of key autophagy-related proteins in disease progression.

Method: Thirty-six male C57BL/6J mice were fed a high-fat diet (HFD) for 12 weeks to induce NAFLD. The mice were then divided into three groups: control (CONTROL, n=12), quercetin 10 mg/kg (QUE1, n=12), and quercetin 50 mg/kg (QUE2, n=12). Histopathological liver evaluations were conducted using the NAFLD Activity Score (NAS). Autophagy markers Beclin1, p62 and LC3 were analysed using immunohistochemistry.

Results: The control group had the highest NAFLD Activity Score (5.83 ± 1.27), which was significantly higher than both QUE1 (4.75 ± 1.06) and QUE2 (5.17 ± 1.27). This increase was primarily attributed to greater steatosis levels ($59.17 \pm 25.39\%$) in the control group. Steatohepatitis was observed more frequently in the control group (83.33%) compared to QUE1 (33.3%) and QUE2 (41.67%). Immunohistochemical analysis revealed significant differences in LC3 and p62 expression between groups, suggesting improved autophagic flux in quercetin-treated groups. Both QUE1 and QUE2 exhibited enhanced autophagy-related protein activity, supporting the potential therapeutic effects of quercetin. Beclin1 expression was strong in all groups, but no significant differences were observed.

Conclusion: Quercetin mitigates NAFLD severity by modulating autophagy-related pathways, primarily enhancing autophagic flux rather than initiating autophagy. This modulation is crucial for the degradation of lipid droplets and the maintenance of liver homeostasis.

Techniques for laparoscopic splenectomy

K. Neokleous, L. Kourtidis, T. Choratta, A. Kalligas, D. Ntrikou, M. Lazaris,
D. Margaritis, P. Dikeakos, E. Kouroumpas, G. Ayiomamitis

First Surgical Department – Laparoscopic Unit, “Tzaneio” General Hospital of Piraeus, Greece

Introduction: The aim of the present study was to present the access techniques and select the most suitable one for laparoscopic splenectomy, which has been the preferred procedure in recent decades for benign and malignant haematological, as well as non-haematological disorders.

Method: Several techniques have been described since 1991, with the three main approaches being anterior, lateral and hand-assisted. The anterior approach is the most standardised technique, ideal for normally sized spleens, allowing better exposure of the lesser omental sac and ensuring control of the splenic artery and vein. The lateral approach is preferred for giant spleens and is based on the initial division of the splenic ligaments (splenorenal and splenocolic), while the hand-assisted approach is the most helpful for novice surgeons with less experience in laparoscopic surgery.

Results: The choice of the most suitable approach is based on the type of neoplasm, the size of the spleen, relevant contraindications and the surgeon's experience with each approach, which requires adjustment of the patient's position (lateral or supine) and ergonomic placement of the working trocars.

Conclusion: Laparoscopic splenectomy is the standard of care; however, it remains a procedure that requires proper planning and delicate handling to achieve success, due to the fragility of the splenic parenchyma and capsule, as well as the close relationship with adjacent organs, including the stomach, pancreas and colon

The role of laparoscopic extended mesenteric excision and kono-s anastomosis in Crohn's disease of terminal ileum. Our experience

P. Dikeakos, A. Kalligas, T. Choratta, K. Neokleous, L. Kourtidis, E. Markaki, M. Karamanis, E. Kouroumpas, C. Iordanou, G. Ayiomamitis

First Surgical Department – Laparoscopic Unit, "Tzaneio" General Hospital of Piraeus, Greece

Introduction: The aim of this study is to examine the safety and replicability of the combination of laparoscopic extended mesenteric excision and Kono-S anastomosis. The endoscopic and surgical reoccurrence rate will be studied as well.

Method: The study includes adult patients that underwent surgery for Crohn's disease of the terminal ileum at "Tzaneio" General Hospital from 01/2022 until 08/2024. All patients underwent laparoscopic right hemicolectomy, the ileocolic vessels were divided close to their origin, the mesentery of the diseased small bowel was excised widely as well, and a Kono-S anastomosis was performed. The postoperative endoscopic follow up was set up at six months, two years and five years.

Results: A total of 14 patients were included in the study with mean age 48,5 years (20-71 years). The mean hospital stay was 7,2 days (4-11 days). No patient presented with anastomotic leak. No postoperative complication >2 according to Clavien-Dindo classification were presented. 10 patients performed postoperative endoscopy at six months and two patients at two years. The mean Rutgeerts score at six months was 0,3 (0-1) and 2(0-4) at two years. To date, no patient has presented surgical reoccurrence.

Conclusion: Although the sample of the study is small, it seems that the combination of the extended mesenteric excision and the Kono-S anastomosis can be performed with safety. The endoscopic and surgical reoccurrence seem to be reduced as well.

Laparoscopic management of large inguinoscrotal hernias: A modern minimally invasive technique in a public health surgical department

D. Ntrikou, D. Margaritis, M. Karamanis, E. Markaki, K. Spyridaki, M. Tsivgouli, K. Neokleous, L. Kourtidis, P. Dikeakos, G. Ayiomamitis

First Surgical Department – Laparoscopic Unit, “Tzaneio” General Hospital of Piraeus, Greece

Introduction: To present and analyse the results of the surgical technique applied by the First Surgical Clinic of Tzaneio General Hospital for the management of large inguinoscrotal hernias, according to modern laparoscopic approaches.

Method: Conducting a prospective study of cases underwent laparoscopic transabdominal preperitoneal hernia repair (TAPP) from 1/1/2024 to 31/1/2024. Our surgical technique, closely following the internationally documented 10 stages of TAPP, focuses on the continuous traction of the hernial sac, the gradual dissection of the components of the spermatic cord and preperitoneal fat from it and the gradual reduction of the hernia into the peritoneal cavity.

Results: In our study, 32 TAPP surgeries were performed on patients with inguinoscrotal hernias, with an average age of 62.7 years. Totally, 75% of these patients presented with a right inguinoscrotal hernia, while the remaining 25% had a left inguinoscrotal hernia. All surgeries were performed in a timely manner, with an average surgical duration of 120 minutes. Intraoperative and postoperative complications were documented in detail, primarily being the presence of seromas and haematomas. The length of hospital stay was restricted to one day, with only 2% of cases requiring readmission.

Conclusion: Laparoscopic management of large inguinoscrotal hernias is feasible through minimally invasive principles. Surgical experience reduces intraoperative time, complications, postoperative pain, and hospital stay length.

The use of a closed-end Picc-Port as an intravenous access device in oncology patients: The first feasibility study worldwide

O. Ioannidis¹, P. Charitidis¹, A. Bourtzinakou¹, G. Gemousakakis¹, S. Simeonidis¹, S. Bitsianis¹, V. Foutsitzis¹, M. Pramateftakis¹, I. Mantzoros¹, S. Angelopoulos¹

¹Fourth Surgical Department of Aristotle University of Thessaloniki, G. Papanikolaou Hospital, Thessaloniki, Greece

Introduction: Venous access consists of constantly evolving techniques for the treatment of oncology patients. The aim of this study is to present our early experience in the world's first use of the closed-end Picc-Port.

Method: This is a prospective study of Picc-Port usage from the first placement in May 2024 to date. The catheter consists of a 5Fr single-lumen PowerGroshong™ PICC Catheter and a PowerPort™ Slim Implantable Port.

Results: Venous catheterisation was performed in the basilic or brachial vein under ultrasound guidance, confirming that the vein size was at least three times the size of the catheter. Catheterisation was performed at the point of maximum size of the vessel, while port implantation was done in the green zone according to the ZIM (zim insertion method). A magnetic tracking device and ECG-based peripheral central catheter tip confirmation technology were used to verify catheter tip position. Of the 13 prospective patients, catheterisation was performed in 12, as in one, the vein size was considered inappropriate. The placement was successful without the need to use other venous catheterisation methods and without complications since. Indications were the physique of patients (cachexia), comorbidities (thrombosis of the jugular vein, extensive burns of the chest and neck), existence of a tracheo-oesophagostomy, previous radiation and accompanying dermatitis of the chest and neck.

Conclusion: This method is a promising technique that combines the advantages of Picc and Port. By minimising the potential complications of classical use of Port, it could be considered the device of the future in oncology.

Esophageal cancer – Surgical experience of our clinic

K. Isaakidis, S. Tsaramanidis, A. Morsi-Gerogiannis, M. Patoulia, I. Gkoutziotis, P. Petras, K. Mpallas

Fifth Department of Surgery, Aristotle University of Thessaloniki, Ippokratio General Hospital, Thessaloniki, Greece

Introduction: The aim of the study was to present the statistical data of our clinic regarding the management of patients with oesophageal cancer.

Method: The study includes 106 cases of oesophageal cancer that were managed in our clinic within the last seven years (2017-2024). The factors that have been analysed were the histologic type, the location of lesion, the surgical method, as well as the benefits from thoracoscopic approach in contrast to open approach, in terms of postsurgical complications and oncologic result (number of removed lymph nodes).

Results: Out of 106 patients, 84,2% were men and 15,8% were women with an average age of 64,5 years. Among these cases, 84,2% were adenocarcinoma, 13,2% were squamous cell carcinoma and 2,6% included other rare types. Totally, 81,5% was found in the gastroesophageal junction, 15,8% was found in the middle oesophagus, while 2,6% in the superior oesophagus. Additionally, in 39,5% of cases McKewon oesophagectomy was selected, in 35,5% Ivor-Lewis, in 21% transhiatal, while 4% were characterised as inoperable. In 57,5% the open approach was performed, while in 39,6% the thoracoscopic approach was performed. Stomach was the most commonly used translocated organ. The complications seemed to be more severe in the open approach, while the number of removed lymph nodes was higher in the thoracoscopic approach – 33,3 on average, in contrast to 29,06 of the open approach.

Conclusion: Our clinic now applies thoracoscopic resection techniques, with an increasing rate in the last two years, offering all the advantages of minimally invasive surgery following the correct oncological treatment.

Development of gastric adenocarcinoma at the exit site of a percutaneous endoscopic gastrostomy: A case report

S. Aitsidou¹, F. Kazantzidis¹, M. Valtou², Z. Tatsiou³, I. Triantafyllidis¹

¹Department of Surgery, General Hospital of Kavala, ²ICU, General Hospital of Kavala, ³Department of Internal Medicine, General Hospital of Kavala

Introduction: Common long-term complications after percutaneous endoscopic gastrostomy (PEG) placement include leakage, gastric ulcer development, inflammation, etc. The aim of this study is to present the management of a patient who developed gastric adenocarcinoma at the exit site of a previous PEG.

Method: We reviewed the case of a 48-year-old male with a history of left hemiplegia, who presented with a chronic granulomatous skin lesion at the site of previous PEG. The biopsy of the lesion revealed skin infiltration of a well-differentiated adenocarcinoma most likely originating from the stomach. The patient underwent upper-GI endoscopy and appropriate preoperative staging. Thereafter, he underwent a D2 subtotal gastrectomy with en bloc cylindrical resection of the abdominal wall surrounding the exit site of the PEG.

Results: Histopathological examination of the resected specimen revealed a pT2 well-differentiated gastric adenocarcinoma of intestinal type. All 49 examined lymph nodes were free. Surgical margins were tumour-free (T2N0M0, R0). Postoperatively, the patient developed necrotising pancreatitis and dehiscence of the gastrojejunal anastomosis which was managed with completion gastrectomy and oesophagojejunal anastomosis. Subsequently, he developed leakage from the oesophagojejunal anastomosis, which was treated with reconstruction of the anastomosis. However, the patient presented again a leakage that was successfully treated endoscopically with a stent placement. The patient remains disease-free 12 months postoperatively.

Conclusion: To the best of our knowledge, this is the first case report of a patient who developed primary gastric adenocarcinoma at the exit site of a previous PEG and was treated surgically.

Butyrylcholinesterase (BChE) levels correlate with surgical site infection risk and severity after colorectal surgery: A prospective single-center study

F. Mulita¹, C. Svoronos², I. Maroulis³, G. Verras³

¹Department of Surgery, General Hospital of Eastern Achaia - Unit of Aigio, Greece, ²Department of Surgery, General Hospital of Paphos, Cyprus, ³Department of Surgery, General University Hospital of Patras, Greece

Introduction: Surgical site infections (SSIs) after colorectal surgery remain a significant concern, which warrants effective predictive markers for prompt diagnosis and treatment. Butyrylcholinesterase (BChE), a non-specific cholinesterase enzyme, has been correlated with the risk of hepatic dysfunction progression and, more recently, infectious diseases and septic shock with ongoing research into the utility of BChE in multiple systemic inflammatory conditions. This prospective study aimed to assess BChE's potential as a predictive marker for surgical site infections and anastomotic leaks after colorectal surgery.

Methods: This single-center prospective study (11/2019–05/2023) enrolled 402 patients who underwent colorectal surgery. BChE levels were measured at four postoperative time points. The primary endpoints focused on BChE's association with complications, particularly surgical site infections (SSIs).

Results: During the third and fifth day post-surgery, SSI patients had significantly lower mean BChE levels (3.90 KU/L vs. 4.54 KU/L, $p < 0.05$, and 4.14 KU/L vs. 4.73 KU/L, $p < 0.05$; respectively). However, multivariate analysis revealed that when adjusted for other factors, low BChE levels on the first postoperative day were associated with 2.6 times higher odds of developing SSI (OR: 2.6, 95%CI: 1.3–3.9, $p < 0.05$). Similar results were found for low BChE levels on the third postoperative day as they were associated with 2.53 times higher odds for developing SSI (OR: 2.5, 95%CI: 1.27–3.87, $p < 0.05$) when adjusted for other factors.

Conclusion: In conclusion, in this prospective observational study, low levels in the first and third post-surgery were associated with an increased risk for the development of SSIs, but not sepsis.

Morbidity and mortality of major surgical operations in the third age

E. Fotopoulou, M. Keramida, D. Mantas

Second Department of Propaedeutic Surgery, Laiko General Hospital, Athens

Introduction: Major surgery in the elderly is associated with increased rates of morbidity and mortality. The aim of the study was to examine perioperative morbidity and mortality in elderly patients.

Method: Patients over () 65 years of age, undergoing major routine or emergency operations from June 2021 to June 2024, were divided into two groups: A (65-79 years) and B (80+). Each group was subdivided into scheduled and emergency surgery subgroups. The epidemiological data of the patients were recorded.

Results: Elderly patients undergoing emergency surgery had more postoperative complications ($p < 0.05$). Concomitant diseases, ASA classification, gender, the number of comorbidities and the type of operation emerged as independent risk factors for intraoperative morbidity among the elderly with a planned operation. Postoperative complications emerged as an independent predictor for hospital days and the need for ICU ($p < 0.01$) for all groups. The elderly had higher mortality rates ($p = 0.021$). All perioperative morbidity factors emerged as independent mortality factors among all groups ($p < 0.01$). Among elderly patients, the ASA classification emerged as a risk factor for overall mortality, but also during scheduled surgery ($p = 0.004$ & 0.013), the type of surgery during emergency surgery ($p = 0.001$) and female gender among the elderly during scheduled surgery ($p = 0.026$).

Conclusion: Surgery in the elderly is accompanied by increased rates of morbidity and mortality compared to the general population.

Large Perineal Hernia

E.E. Dimou, O. Tsiboukidi, S. Adamopoulos, K. Petropoulos, V. Karanassiou,
A. Kainourgiaki, D. Mathiou, M.M. Kosiori, E. Xatzopoulos, A. Roubou, A. Karaklas

Department of Surgery, Sismanoglio-Amalia Fleming General Hospital, Athens, Greece

Introduction: The purpose of this report is to present the case of a 70-year-old woman with a perineal hernia after an abdominoperineal rectal resection due to rectal cancer eight years ago.

Method: A 70-year-old female patient came to our department for the treatment of a perineal hernia, with reported pain in the perineum during increased intra-abdominal pressure and standing. Clinical examination and upper-lower abdominal/chest CT were performed, which revealed prolapse through the pelvic floor, small bowel coils and part of the bladder and vagina. She had undergone an abdominoperineal rectal resection in 2016 due to rectal cancer, followed by 8 cycles of chemotherapy.

Results: After a full preoperative checkup, the patient underwent plastic repair of the hernia with intrapelvic mesh placement after transabdominal access with careful fixation of the mesh around the perimeter of the pelvic entrance and two strong sutures at the sacral area and the posterior wall of the uterus. The patient had an uneventful postoperative course.

Conclusion: Perineal hernia is a rare condition of the pelvic floor, with prolapse of the intra-abdominal viscera into the perineum through a pelvic floor defect. A number of different repair techniques (laparoscopic/perineal/ transabdominal approach) have been described in the literature however the recurrence rate is high.

Stromal tumours - A single center retrospective study

K. Toutouzas¹, N. Intzes¹, I. Stefanou², T. Triantafyllou¹, D. Vouros¹, M. Frountzas¹,
D. Stefanoudakis¹, S. Patsouris², S. Volteas², D. Theodorou¹

¹First Propaedeutic Department of Surgery, National and Kapodistrian University of Athens, Hippocraton General Hospital, Athens, Greece, ²Surgical Department, Hippocraton General Hospital, Athens, Greece.

Introduction: Gastrointestinal stromal tumours (GISTs) are relatively rare mesenchymal neoplasms of the gastrointestinal tract. They are believed to originate from interstitial cells of Cajal or related stem cells. They express the hematopoietic progenitor cell marker (CD 34) and the growth factor receptor c-KIT (CD 117), which serve as an important defining feature for the diagnosis. The incidence of GISTs has been estimated to be 6 to 15 cases per million individuals per year. The aim of this study was to analyse the epidemiological profile of gastrointestinal stromal tumours (GISTs) by correlating clinical and pathological findings of patients treated in our hospital.

Method: We conducted a retrospective analysis of 157 patients by collecting demographic, operational and histology features of patients with GISTs who were treated in our hospital from 2014 to 2024.

Results: The mean age was 65 years old (range of 23-87 years), with no difference in the incidence between women and men. The most frequent location was the stomach, followed by the small intestine. The most commonly performed operation was wedge resection followed by partial and subtotal gastrectomy. R0 excision was achieved in 85% of our patients. The most common subtype was spindle cell (52%), followed by mixed type (40%) and epithelioid type (6%), while positive CD 34 and CD 117 markers were found in more than 70% of our patients. The most common location for giant GIST (over 10cm) was the stomach.

Conclusion: In this study the demographic, operative and histology findings of patients diagnosed with GISTs correlate with international data previously reported.

Duodenal neoplasms - A single-center retrospective study

K. Toutouzas¹, N. Intzes¹, T. Triantafyllou¹, D. Vouros¹, C. Glava², M. Frountzas¹,
E. Kitsou¹, D. Theodorou¹

¹First Propaedeutic Department of Surgery, National and Kapodistrian University of Athens, Hippocraton General Hospital, Athens, Greece, ²Laboratory of Pathology, Hippocraton General Hospital, Athens, Greece.

Introduction: The aim of this case series is to present duodenal neoplasms that were treated in our hospital in the last decade. We present our experience on the diagnosis and management of these infrequent neoplasms.

Method: It is a retrospective analysis of 24 cases of duodenal neoplasms. We collected demographic, clinical and pathological data of patients with duodenal tumours who were treated in our hospital during the last decade.

Results: The incidence ratio between men and women was 2:1. The mean age was 62,5 years. The most common histological type was duodenal gastrointestinal stromal tumour (GIST) followed by adenocarcinomas, neuroendocrine tumours (NETs) and adenomas. Whipple procedure was performed in 13 cases, while sphenoid or segmental resection was performed in 11 cases. The descending and horizontal parts were the most frequent localisations for duodenal neoplasms. Most of our patients presented with anaemia, haemorrhage and obstruction. The mean diameter of GISTs and adenocarcinomas was 3,77cm, while the mean diameter of NETs was just 1,05cm. R0 excision was achieved in 23 out of 24 patients with duodenal tumours that were treated in our surgical department.

Conclusion: Duodenal neoplasms are rare but significant neoplasms of the gastrointestinal tract. Despite the different histological types, surgical resection is the primary treatment option. The management of duodenal tumours remains a great challenge due to their rarity, the lack of pathognomonic symptoms and the complexity of the indicated surgery.

Case report: Thoracoabdominal penetrating trauma

P. Georgiou, C. Bartsokas, C. Thrasyvoulou

Trauma Clinic, Nicosia General Hospital, Cyprus

Introduction: Thoracoabdominal penetrating injuries with a foreign body exiting to the other side are extremely rare, carry high morbidity and mortality. We encountered a case of thoracoabdominal penetrating injury with a long metallic pipe.

Method: A 24-year-old patient with a fall injury with penetrating thoracoabdominal trauma from metallic pipe was operated on.

Results: On initial assessment, the patient was talkative, with equal bilateral respiratory murmurs and haemodynamically normal. A penetrating wound with a wedged metal was observed, while the entry point (scaffolding segment) was at the right lower thorax and an exit point was beyond the left nipple. Chest ultrasound and pelvis X-ray were negative. The patient immediately underwent exploratory laparotomy and left thoracotomy, which were negative for injury. The metal stake was removed and chest tubes were placed bilaterally. Computed tomography revealed bilateral pneumothorax, subcutaneous emphysema, air in the mediastinum, fractures of the 8th and 10-12th ribs on the right and the 8th rib on the left. During his hospitalisation he developed pulmonary complications (pneumonia and cystic effusion), which were treated with percutaneous drainage and antibiotic treatment. He was discharged on the 40th postoperative day.

Conclusion: Initial management of the patient with an impaled object should follow Advanced Trauma and Life Support (ATLS) principles. In a resource-limited setting, plain X-rays are valuable in surgery planning. Retained foreign bodies, especially those with sharp tips or edges, have to be dissected and removed with extra caution and meticulousness by a trauma surgeon in a controlled setting.

Management of trauma patient with simultaneous blunt and penetrating injuries

P. Patias¹, K.M. Liosis¹, E. Papadima¹, A.I. Melani¹, E. Stavropoulou¹, S. Mourtarakos¹, K. Koumarelas², I. Anastasiadis², I. Massalis¹

¹Department of Surgery, General Hospital of Nafplion, Nafplion, ²Department of Radiology, General Hospital of Nafplion, Nafplion

Introduction: Trauma is the leading cause of death for patients aged 1-44 years old and is usually caused by blunt injuries due to Motor Vehicle Accidents (MVA). On the other hand, penetrating injuries which dominate in South Africa, are recently increasing in Greece as well. Our aim was to demonstrate the management of a trauma patient with simultaneous blunt and penetrating injuries.

Method: A 34-year-old male was admitted to the Emergency Department (ED) due to penetrating injury at the left side of the abdomen after being assaulted and involved in an MVA. An evisceration with greater omentum was identified. In addition, he was intoxicated, he had multiple lacerations at the head -torso- limbs, as well as extended bruises of the left hemithorax. According to the Advanced Trauma and Life Support (ATLS) the patient was resuscitated and stabilised, and further radiologic investigations were done.

Results: The patient underwent urgent laparotomy. Intraoperatively, 800 ml of haemoperitoneum, Grade III splenic injury, Grade II jejunal injury, expanding mesenteric haematoma, while active bleeding from peripheral branches of the superior mesenteric Vessels was also found. Packing was done followed by splenectomy. The rest of the bleeding was controlled by direct pressure and suturing. Lastly, the jejunal injury was primarily repaired. The recovery was uneventful and the patient was discharged on day seven postoperatively.

Conclusion: The management of a trauma patient with simultaneous blunt and penetrating injuries is following the same treatment protocols. Regardless of the medical facility, the decision making should be prompt without jeopardising the outcomes.