

Abstracts of the Current State of Hernia Surgery and Brazilian Hernia Congress 2025

Campinas, 06–07 July 2025



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Welcome Address

It is with great pleasure that we present this special edition of *JAWS*, dedicated to the 2025 Brazilian Hernia Congress, held in Campinas, São Paulo.

This issue reflects the enthusiasm and scientific strength that defined the 2025 meeting — the largest hernia event ever held in Brazil. The congress brought together national and international experts, fostering high-level scientific exchange, innovation, and collaboration in abdominal wall surgery.

In this edition, we are proud not only to highlight key moments and contributions from the congress, but also to jointly publish a dedicated article that chronicles the historical construction and evolution of the Brazilian Hernia Society. This retrospective offers valuable insight into the journey that shaped our community and continues to guide its future.

We hope this issue captures the spirit of excellence, growth, and unity that characterized the 2025 Congress and inspires continued advancement in hernia surgery.

Pedro Amaral – Brazilian Hernia Board



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The current state of hernia surgery and Brazilian hernia congress 2025

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Keywords

Brazil, hernia specialists, inguinal hernia, outcomes, ventral hernia

BHS ERA 1 hernia surgery in Brazil and BHS summarized history

Over the years, abdominal wall surgery has traditionally been encompassed within the scope of general surgery. In recent decades, however, there has been growing recognition that abdominal wall defects present unique characteristics that warrant dedicated study and specialization. With this objective, the European and American Hernia Societies were established in 1979 and 1997, respectively, serving as pioneers for the creation of several other hernia-focused societies worldwide. In alignment with this global movement, the Brazilian Hernia Society (BHS) was founded in 2009.

In its early years, the BHS began with a limited number of members and encountered initial resistance, often questioned locally as to the necessity of a society dedicated exclusively to the study of abdominal wall hernias in Brazil. Its formative period was characterized by efforts to encourage surgeons to shift their perspective on hernia disease toward a more comprehensive approach, one that was more technically refined, dynamic, and inclusive of social and patient-centered considerations. Gradually, new members joined the society, following its development and motivated by the increasing prominence of international hernia societies. Concurrently, the rise of minimally invasive surgery (MIS) further accelerated engagement, attracting surgeons interested in mastering novel techniques initially demonstrated at international congresses and transforming established surgical practices.

Over its 15-year history, the BHS has played a central role in providing technical and scientific support to its members. Several clinical guidelines for inguinal and ventral hernia repair have been published, with the aim of guiding and adapting best practices in hernia surgery to the realities and resources of Brazilian healthcare. Currently, the BHS comprises approximately 524 active members, representing a 52% increase in membership over recent years.

BHS ERA 2 – present: development and improving outcomes

The evolution of abdominal wall surgery in Brazil and its current landscape

The geographical extent of Brazil and, most importantly, the presence of socioeconomic regions with markedly disparate realities poses significant challenges to the uniform delivery of surgical care across the country. In general, open surgical approaches continue to play a prominent role in the Brazilian healthcare setting and account for the majority of abdominal wall procedures performed nationwide. Open techniques have been systematically studied and documented since the 1960s, exemplified by the fascial transposition technique described by Professor Alcino Lázaro da Silva [1]. This contribution received well-deserved recognition and reflects Brazil's longstanding commitment to the study and advancement of abdominal wall surgery.

Minimally invasive surgery (MIS) was introduced in Brazil in 1990 by Szego and Roll, with hernia surgery entering this field shortly thereafter in 1991 [2]. Although open surgery remains predominant, recent years have witnessed a progressive increase in the adoption of

MIS techniques, particularly in major urban centers. Laparoscopic approaches have evolved substantially in Brazil, leading to internationally recognized contributions. Notable examples include the standardization of the transabdominal preperitoneal (TAPP) hernioplasty by Furtado and colleagues [3] and the development of an endoscopic technique for rectus diastasis repair by Claus, Malcher, and Cavazzola [4].

The first robotic abdominal wall procedure in Brazil was performed in 2008 by Abdalla and colleagues [5], at a time when only three robotic platforms were available nationwide and were primarily dedicated to urologic surgery. Over the past 5 years, the number of robotic systems has increased dramatically, with approximately 160 platforms currently in operation across the country. Robotic abdominal wall surgery has emerged as one of the fastest-growing fields and now occupies a prominent position in clinical practice. Techniques such as robotic transversus abdominis release (TAR), enhanced-view totally extraperitoneal (eTEP), and preperitoneal extended totally extraperitoneal (peTEP) repairs are now routinely performed by specialized teams. More recently, Brazil achieved a major milestone in telesurgery, with Cavazzola, Loureiro, and colleagues performing remote surgery over the longest reported distance between the surgeon console and the patient, measuring 12,034 km [6].

Brazilian data on hernia

Currently, approximately 400,000 abdominal wall surgeries are performed annually within the Brazilian public health system, representing a 13% increase in recent years [7]. Hernias account for a substantial proportion of patients awaiting surgical treatment in the public sector, largely due to the coexistence of high disease prevalence and prolonged waiting lists for access to care. Hernia disease represents a significant cause of work limitation and social security expenditures related to work absence, highlighting not only a healthcare burden but also an important social and humanitarian issue. The BHS plays a central role in patient and institutional awareness, contributing to informed decision-making by policymakers and fostering public investment in hernia care. In recent years, public funding dedicated to hernia treatment has increased by approximately 97 million US dollars.

Social activities

The BHS humanitarian surgical campaigns have been conducted for 11 years with the objective of

promoting health through integrated clinical care and scientific engagement. Over this period, more than 1,000 patients have undergone surgical treatment, receiving comprehensive care from preoperative assessment through postoperative rehabilitation. These initiatives are carried out across different regions of the country, predominantly in remote or underserved areas, and aim to integrate local surgical teams while providing hands-on training and education. These campaigns typically reduce local hernia surgery waiting lists by 30%–50%.

Abdominal core health quality collaborative (ACHQC)

In an effort to better understand national outcomes in abdominal wall reconstruction surgery, the BHS initiated a partnership with the Abdominal Core Health Quality Collaborative (ACHQC) in 2022. Following necessary legal and regulatory adaptations to enable implementation of the ACHQC model in Brazil—supported by the ACHQC Board throughout the process—Brazil became the first country outside the United States to formally join the collaborative. Participation in the ACHQC enables benchmarking against international standards and fosters continuous quality improvement and maturation of surgical practice nationwide through clinical research.

Brazilian hernia congress 2025

The 2025 Brazilian Hernia Congress marked a milestone in BHS scientific events, representing the largest abdominal wall surgery meeting ever held in Brazil. The congress registered 543 participants, reflecting an approximate 30% increase compared with previous editions. This growth underscores the rising interest in abdominal wall surgery and the expanding credibility and positioning of the BHS. The scientific program featured 86 speakers from 13 countries and included 97 presented studies across inguinal, ventral, and hiatal hernia sessions, with dedicated tracks on preoperative optimization, surgical techniques, and management of postoperative complications.

BHS ERA 3 – future perspectives

At the national level, two primary strategic objectives guide the BHS in the near future. The first is to capitalize on the significant evolution of hernia and abdominal wall

surgery and to formally establish it as an independent and recognized surgical subspecialty in Brazil, rather than within general surgery. When this goal is achieved, the BHS will be fully prepared to support residency training programs in the structured education and certification of hernia specialists.

The second objective relates to ongoing efforts to improve reimbursement for abdominal wall surgeons within both public and private healthcare systems. Currently, there is limited stratification of procedural complexity, which may result in reimbursement for primary, low-complexity hernia repairs being unjustly similar to that of complex abdominal wall reconstructions. These procedures require distinct levels of technical expertise, differ substantially in operative complexity and postoperative course, and are associated with significantly higher operational costs.

From an international and academic perspective, the BHS aims to continue providing its members with technical guidance, education, and scientific support to ensure the delivery of high-quality abdominal wall surgery. The long-term objective is to align Brazilian practice standards with those of the most established and influential hernia societies worldwide.

The Brazilian Hernia Society is a relatively young, socially engaged organization that has demonstrated consistent growth over the last decade. This trajectory was exemplified by the 2025 Brazilian Hernia Congress, the largest and most impactful abdominal wall surgery meeting ever held in Brazil. The BHS envisions a future in which hernia and abdominal wall surgery is formally recognized as a distinct medical specialty, reflecting its complexity, scientific maturity, and clinical relevance.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

All authors are members of the Brazilian Hernia Society and actively contributed to the organization and scientific development of the 2025 Brazilian Hernia Congress. PA is the corresponding author of this manuscript and served as President of the Scientific Committee of the 2025 Brazilian Hernia Congress. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Oral Presentations

(Organizadas Na Ordem Original Enviada)

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1

Laparoscopic Transabdominal Preperitoneal (TAPP) Inguinal Hernioplasty Without Mesh Fixation – A Prospective Study

Abstract

Aim

The repair of inguinal hernia using the transabdominal preperitoneal (TAPP) laparoscopic hernioplasty technique offers several benefits to the patient, such as lower postoperative pain rates and a shorter time to resume daily activities. However, laparoscopic inguinal hernia repair using the TAPP technique requires a tackler for mesh fixation, making the procedure expensive. Therefore, performing the repair without mesh fixation emerges as a potentially safe and more cost-effective strategy. The objective of this study is to evaluate the effectiveness and clinical outcomes of laparoscopic TAPP inguinal hernioplasty without mesh fixation in patients classified as grade I and II according to the European Hernia Society (EHS) Inguinal Hernia Classification.

Material and Methods

A prospective study was conducted with 40 patients who underwent TAPP inguinal hernioplasty using a polypropylene mesh without fixation. Patients were followed up in outpatient consultations until the 6th postoperative month and answered to a telephone questionnaire in June 2020. The questionnaire assessed quality of life, satisfaction level, return to daily activities, and postoperative pain.

Results

A total of 52 hernias were repaired, with 25% of patients presenting bilateral hernias and 5% having concurrent ipsilateral direct and indirect hernias. The long-term follow-up rate was 72.5%, with an average follow-up of 27.2 months. No patients experienced recurrence or chronic pain, 93% reported an improvement in quality of life, and 100% stated they were able to perform all daily activities. The incidence of surgical site infection was 12.5%.

Conclusion

The repair of inguinal hernia using the TAPP technique without mesh fixation in EHS grade I and II patients proved to be effective and safe.

Epidemiological Profile Of Pediatric Inguinal Hernia Hospitalizations In Brazil (2014-2023): Impact Of The COVID-19 Pandemic

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Abstract

Introduction

Inguinal hernia is the most common surgical condition in childhood, with an incidence of 1-2% in full-term newborns and a higher prevalence in boys. Surgery is the standard treatment to prevent complications such as incarceration and strangulation.

Objective

To analyze the epidemiological profile of pediatric inguinal hernia hospitalizations in Brazil between 2014 and 2023.

Methods

This is an ecological, descriptive, and quantitative study based on data from the Hospital Information System of SUS (SIH/SUS) between 2014 and 2023. Demographic, regional, and hospitalization variables (age, sex, region, and type of admission) were analyzed.

Results

A total of 248,215 pediatric hospitalizations for inguinal hernia were recorded. The Southeast region accounted for 37% of cases, followed by the Northeast (30.8%). The most affected age group was 1 to 4 years (37%), followed by 5 to 9 years (27.1%). Boys represented 75.5%

of hospitalizations. Elective procedures predominated (80.2%), but children under 1 year had a higher proportion of emergency admissions (38%). During the COVID-19 pandemic (2020-2021), elective surgeries declined, without a significant increase in emergency cases, except in infants under 1 year.

Conclusion

The findings highlight the need to prioritize early surgery in male infants, who are at greater risk of developing or worsening the condition. The predominance of elective hospitalizations over the past decade reflects an efficient management strategy, reducing hospital stays and costs compared to emergency cases. Furthermore, this study provides valuable insights for strategic budget planning in a context of public spending restrictions, optimizing pediatric care in the SUS. The selective triage of urgent cases within at-risk populations did not increase the incidence of incarcerations and helped reduce the burden on the public healthcare system during the COVID-19 crisis.

Evaluation Of Phasix Mesh Use In Robotic Surgery For Gastroesophageal Reflux Correction: Impact On Recurrence

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Abstract

Background

Robotic surgery has emerged as an advanced and precise modality for the treatment of gastroesophageal

reflux disease (GERD), offering enhanced dexterity, stable three-dimensional visualization, and refined dissection of the esophageal hiatus. One of the main challenges in antireflux surgery remains the recurrence of GERD, often associated with anatomical failures of the hiatal repair. The reinforcement of hiatoplasty with synthetic or biosynthetic meshes has been proposed as a means to reduce this recurrence, particularly in patients with large or recurrent hiatal hernias. Phasix mesh, composed of poly-4-hydroxybutyrate (P4HB), presents a slowly absorbable, monofilament, and resorbable structure designed to provide temporary support while promoting native tissue regeneration.

Objective

This study aimed to evaluate the clinical efficacy and safety of Phasix mesh for hiatal reinforcement in robotic fundoplication for GERD, focusing on recurrence rates and postoperative outcomes.

Methods

A retrospective review was conducted including 39 patients who underwent robotic fundoplication for GERD between 2021 and 2024. Patients were divided into two groups: Group A (with Phasix mesh reinforcement) and Group B (without mesh). All patients were followed for at least 12 months, with standardized clinical evaluation of reflux symptoms, upper endoscopy, and contrast radiography when recurrence was suspected. Recurrence was defined as symptomatic relapse confirmed by either endoscopic or radiologic evidence of herniation or wrap disruption. Statistical analysis was performed using Fisher's exact test, with odds ratios calculated to assess relative risk.

Results

No intraoperative or postoperative complications related to mesh placement were recorded. The recurrence rate was 0% in the Phasix group and 8.3% in the non-Phasix group after one year of follow-up. No patients developed postoperative dysphagia, mesh migration, or food impaction. Despite this favorable trend, statistical analysis revealed no significant difference between the groups (Odds Ratio: 0.00; $p = 1.0000$).

Conclusion

The use of Phasix mesh for hiatal reinforcement during robotic fundoplication demonstrated safety and a potential reduction in recurrence rates, supporting its use in selected patients, particularly those with large or recurrent hernias. However, given the limited sample size and

short-term follow-up, larger prospective and randomized studies are required to confirm these preliminary findings and to define optimal patient selection criteria for mesh reinforcement in robotic antireflux surgery.

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Robotic-Assisted Transabdominal Preperitoneal (Ventral TAPP) Incisional Hernioplasty For The Reconstruction Of Post-Plastic Surgery Muscular Injury

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Abstract

Background

Incisional hernias remain a major challenge in abdominal wall surgery, particularly in patients with previous postoperative complications such as large hematomas and secondary muscular damage. Minimally invasive approaches, especially robotic-assisted surgery, have significantly advanced the precision and safety of complex abdominal wall reconstructions.

Methods

We report the case of a female patient presenting with progressive abdominal bulging and chronic pain after spontaneous resolution of a large retromuscular hematoma following aesthetic abdominal surgery.

Computed tomography revealed a focal defect in the abdominal wall associated with atrophy of the transversus abdominis and internal oblique muscles. Given the anatomical distortion and previous surgical history, a robotic-assisted transabdominal preperitoneal (Ventral TAPP) approach was selected to achieve optimal visualization, precise dissection, and functional restoration of the abdominal wall.

Results

The surgical procedure consisted of four main steps: (1) identification and careful dissection of the preperitoneal plane, (2) anatomical repair of disrupted muscular layers, (3) placement and fixation of a synthetic mesh in the retromuscular position to reinforce the reconstructed area, and (4) peritoneal closure to ensure complete prosthetic coverage. Robotic assistance provided enhanced dexterity and depth perception, enabling meticulous reconstruction with minimal tissue trauma. The patient had an uneventful recovery, with complete resolution of symptoms and no recurrence observed during follow-up.

Conclusion

Robotic Ventral TAPP represents an effective and reproducible technique for the management of complex incisional hernias and post-surgical muscular defects. The approach offers superior ergonomics and precision compared to conventional laparoscopy, facilitating delicate tissue handling, accurate anatomical restoration, and improved postoperative outcomes. This case underscores the growing importance of robotic surgery in the personalized treatment of complex abdominal wall disorders, highlighting its potential to reduce morbidity, recurrence rates, and aesthetic compromise in selected patients.

5

Airway Pressure Is A Valid And Predictive Expression Of Intra-Abdominal Pressure: A Cross-Sectional Study

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Abstract

Background

Intra-abdominal hypertension (IAH) and abdominal compartment syndrome (ACS) are rare but critical conditions among patients undergoing complex ventral hernia repair (VHR). Intra-abdominal pressure (IAP) monitoring via bladder pressure measurement is the gold standard but has limitations in the intraoperative setting. Airway pressures (AWP), particularly peak inspiratory pressure (PIP) and plateau pressure (PLAT), have been proposed as surrogate markers for IAP. However, there is no established correlation between IAP and AWP in human studies. This study aimed to evaluate the correlation between IAP and AWP during laparoscopic cholecystectomy, and determine the diagnostic accuracy of AWP for detecting intraoperative IAH.

Methods

A prospective, observational, cross-sectional study was conducted at the Goiânia General Hospital, Brazil. Patients aged ≤ 60 years, ASA I–II, undergoing elective laparoscopic cholecystectomy were included. Balanced general anesthesia was administered with volume-controlled ventilation. Pneumoperitoneum was established in increments of 5, 10, 15, and 20 mmHg, with AWP (PIP and PLAT) recorded at each level. Correlation analysis was performed using ANOVA and Tukey's post hoc test. ROC curve analysis determined the diagnostic accuracy of AWP for detecting IAP ≥ 15 mmHg.

Results

Seventy-eight patients were analyzed. A significant correlation was observed between IAP and AWP ($p < 0.001$). PIP increased by 7.02cmH₂O at 15mmHg IAP and by 8.08cmH₂O at 20mmHg. ROC analysis for PIP showed an AUC of 0.954 for IAP levels of 15mmHg. The optimal PIP threshold for detecting IAP levels of 15mmHg was 23cmH₂O, with 96.25% sensitivity and 95.00% specificity.

Conclusions

PIP strongly correlates with IAP and may serve as a reliable intraoperative indicator for IAH, providing a non-invasive, real-time monitoring alternative for anesthesiologists and surgeons. These findings suggest that AWP monitoring could enhance intraoperative vigilance for IAH/ACS. Further studies are needed to validate these findings in patients undergoing VHR and other surgical scenarios.

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Epidemiological Profile Of Inguinal Hernia Hospitalizations In A Private Center In Recife, Brazil

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Abstract

Introduction

Inguinal hernia is a common surgical condition that can significantly impact patients' quality of life. Understanding the epidemiological profile of hospitalizations due to this condition allows for better planning of prevention

and treatment strategies, as well as optimization of hospital resources.

Objective

To describe the profile of hospitalizations for inguinal hernia in a private hospital center in Recife over the past two years.

Methods

A retrospective, quantitative, cross-sectional study covering the years 2023 and 2024, based on the analysis of medical records of hospitalizations for inguinal hernia. Variables such as age, sex, hernia laterality, and length of hospital stay were evaluated.

Results

A total of 1,182 hospitalizations for inguinal hernia were analyzed, with a predominance of males (87.39%) compared to females (12.61%). Most cases were unilateral hernias (82.27%), while 17.73% were bilateral. The mean patient age was 53.36 years, ranging from 16 to 89 years. The average length of stay was 15.77 hours, varying between 0.3 and 191 hours. Antibiotic use was recorded in only 2.12% of cases.

Conclusion

Hospitalizations for inguinal hernia were more frequent among men, especially in the age group over 50 years. Most cases were unilateral, with a relatively long average hospital stay. These findings highlight the need for preventive strategies and treatment protocols aimed at reducing hospital stay duration and optimizing health-care resources.

7

Innovations In Inguinal Hernia Repair Techniques

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Abstract

Introduction

Inguinal hernias are protrusions of intra-abdominal or extraperitoneal viscera or adipose tissue that pass through all or part of the inguinal canal. Inguinal hernia repair is a common procedure, making it essential to know about innovative techniques to optimize results and improve patient outcomes.

Objective

To analyze advances in inguinal hernia repair techniques, highlighting contributions to reducing post-operative complications.

Methods

This integrative literature review was developed using the PubMed database, with the descriptors “Hernia, Inguinal” and “Repair Technique” indexed on the DeCS/MeSH platform with the Boolean operator “AND.” Studies published between 2022 and 2025 were included, including clinical trials, meta-analyses, and cohort studies. Thus, 12 articles were selected from among 149 found.

Results

Laparoscopic total extraperitoneal (TEP) repair showed more mild pain (60.3% vs. 13.9%) and less severe pain (7.9% vs. 15.1%) compared to open Lichtenstein repair with tension-free technique (LMR), as well as fewer complications (13.9% vs. 23.9%). Four studies compared laparoscopic and robotic surgeries, with no differences in complications. However, longer operative time was demonstrated in robotics, with less use of opioids and chronic pain. Two studies evaluated the needlescopic technique for dissection of the hernia sac neck, with and without closure of the peritoneal defect demonstrating that the absence of sutures reduced surgical time without additional complications. There were no significant differences between mesh types and fixation techniques. Studies comparing endoscopic techniques indicated that TAPP had lower recurrence, swelling, and time to return to work, while TIPP and TEP had similar results.

Conclusion

Minimally invasive techniques improve prognosis by reducing pain and complications, promoting early rehabilitation. Reduced use of opioids and chronic pain impact quality of life. Further comparative studies are needed to improve therapeutic choices.

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Left Traumatic Diaphragmatic Hernia: A Case Report And Mesh-Free Laparoscopic Approach

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Abstract

Introduction

Traumatic Diaphragmatic Hernia (TDH) is a rare condition associated with high-energy trauma, carrying a risk of visceral herniation and severe complications. Diagnosis is challenging due to clinical variability, and prompt surgical treatment is crucial. This study reports a case of TDH treated with videolaparoscopy, highlighting its efficacy in stable patients.

Objective

To report a case of TDH managed with videolaparoscopy and to discuss the technique’s efficacy, recovery profile, and patient selection criteria.

Methods

A 38-year-old man, involved in a motor vehicle accident, presented with epigastric pain, dyspnea, and reduced left vesicular breath sounds. Hemodynamically stable, Computed Tomography (CT) revealed left diaphragmatic rupture with gastric and splenic herniation. He underwent videolaparoscopy, with mesh-free repair using five "X" sutures and placement of a chest tube for associated hemopneumothorax.

Results

Laparoscopy identified an 8 cm lesion in the left diaphragmatic crus, which was corrected with primary suture. The patient had an adequate postoperative course, achieving ambulation on Day 2 and hospital discharge on Day 5, following chest tube removal and radiological confirmation of pulmonary expansion. There were no postoperative complications or recurrence.

Conclusions

Videolaparoscopy proved safe and effective for TDH in stable patients, offering accelerated recovery and lower morbidity compared to laparotomy. Direct, mesh-free primary suture was adequate for this moderate defect, corroborating evidence that prosthetic reinforcement offers no advantage for smaller lesions. Early CT diagnosis was crucial, preventing complications such as strangulation. The favorable outcome was also supported by the absence of associated injuries (present in 95% of TDH cases). The technique is limited to patients without hemodynamic instability or complex lesions, requiring meticulous selection. This report reinforces the value of minimally invasive approaches, combining agile diagnosis and individualized therapeutic planning in selected trauma cases.

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Transversus Abdominis Release (TAR) Procedure For Immediate Reconstruction Of The Abdominal Wall After Resection Of A Desmoid Tumor

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Abstract

Introduction

Desmoid tumor is a benign but locally aggressive neoplasm that can infiltrate the abdominal muscles, requiring surgical resection with adequate margins. Abdominal wall reconstruction after extensive resections is challenging, and the TAR procedure allows the creation of ample space for tension-free surgical mesh placement.

Objective

Report a case of immediate reconstruction of the abdominal wall using the TAR technique after resection of a desmoid tumor in the right iliac fossa (RIF).

Methods

A 45-year-old female patient, G3P3, with a history of previous liposuction and abdominoplasty, presented with a palpable mass in the RIF for two years. Computed tomography revealed a solid lesion measuring approximately 8 cm, infiltrating the lateral muscles of the RIF, compatible with a desmoid tumor. An ultrasound-guided biopsy was performed, which confirmed the diagnosis. A midline laparotomy was performed with resection of

the tumor with free margins, and reconstruction of the abdominal wall with TAR technique and placement of a 30x30cm surgical mesh.

Results

The patient had an uneventful postoperative period and had medical discharge on the second day. Pathological examination and immunohistochemistry confirmed the presence of a resected desmoid tumor with free margins.

Conclusion

TAR is effective an technique in abdominal wall reconstruction after extensive resection, allowing the use of a large surgical mesh with extensive overlap and without anatomical limitations imposed by bony structures. Choosing a refined technique is essential to ensure the functional integrity of the abdominal wall and reduce the risk of complications.

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VRAM Flap And Anterior Component Separation For The Treatment Of Bladder Exstrophy In Adults

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Abstract

Introduction

Bladder exstrophy is a rare congenital anomaly encountered in adulthood, characterized by incomplete closure

of the bladder, urethra, anterior abdominal wall, and pubic symphysis. Surgical management poses a significant challenge, particularly regarding the reconstruction of the anterior abdominal wall.

Objective

To describe a complex surgical technique, not previously reported in the literature, that combines two abdominal wall reconstruction procedures without the need for osteotomy.

Methods

An adult male patient with bladder exstrophy and epispadias had previously undergone multiple surgical procedures, including a Mitrofanoff procedure and bladder augmentation with distal ileum. He developed chronic bladder exstrophy with a vesicocutaneous fistula. A multidisciplinary team (urology, general surgery, and plastic surgery) performed a midline supra- and infraumbilical laparotomy, adhesiolysis, and excision of the exstrophic bladder segment with primary closure. The left rectus abdominis muscle was mobilized with preservation of the inferior epigastric artery. The hypogastric defect was repaired using a vertical rectus abdominis myocutaneous (VRAM) flap anchored to the right pubic tubercle. Bilateral anterior component separation was then carried out for midline closure, reinforced with a 30 x 30 cm polypropylene mesh.

Results

The patient developed a postoperative cutaneous urinary fistula, which was managed with a perineal cystostomy. No abdominal wall dehiscence or infectious complications occurred.

Conclusion

The combination of a VRAM flap and anterior component separation without osteotomy for anterior abdominal wall reconstruction in adults with bladder exstrophy represents a novel and technically demanding approach. This method provides effective hypogastric coverage with the rectus muscle and a stable anatomical foundation for mesh fixation and structural support, showing promise as a valuable reconstructive option for this rare and complex condition.

Evaluation Of Postoperative Pain In Laparoscopic Inguinal Herniorrhaphies By TAPP Technique With Self-Gripping Mesh Versus Staple Fixation

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Abstract

Introduction

Inguinal hernia repair techniques have been changing over time to decrease recurrence and postoperative pain rates. New technologies have been applied with the introduction of absorbable material, self-gripping and different weights meshes.

Purpose

The aim of this study is to compare postoperative pain in patients undergoing videolaparoscopic inguinal herniorrhaphy by pre-peritoneal transabdominal technique (TAPP) using self-gripping mesh and the same TAPP using prolene mesh fixed with staples.

Materials and Methods

There were analyzed 52 patients who underwent laparoscopic inguinal herniorrhaphy technique - TAPP. The included patients were operated consecutively and in two groups of 26 patients each: group 1 with self-gripping mesh and group 2 with endoscopic stapler-fixed prolene mesh. VAS was recorded after the first 6 hours of surgery

and a second registration was made after 24 hours. Patients were followed up to 10 months after surgery.

Results

In this study 46 male and 6 female patients underwent surgery. Average age was 54.9. Regarding laterality, most were right hernias (51.9%). When analyzing postoperative pain, the median VAS after 6 hours for all patients was 3. The median VAS after 24 hours was 1. When comparing the groups, there was a difference in VAS after 6 hours, with p value of 0.053. In group 1 the median VAS after 6 hours was 2, while in group 2 it was 3. In VAS after 24 hours there was no difference between groups, with a median of 1 in both and p value of 0.277.

Conclusion

The results of these studies suggest that the use of self-gripping mesh during herniorrhaphy by the TAPP technique is associated with less immediate postoperative pain (after 6 hours) than in the staple-fixed TAPP. In addition, the technique was safe, reproducible with low complication rate, early discharge and good postoperative recovery.

Morbidity And Mortality Of Emergency Treatment For Abdominal Wall Hernia: A Two-Year Analysis At A Municipal Hospital In Rio De Janeiro

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Abstract

Introduction

Abdominal wall hernia is one of the main pathologies in general surgery. Primary and incisional hernias contribute to the long waiting lists in public health system. It is common for patients to wait long periods to undergo surgery, leaving them exposed to complications. This condition is exacerbated when referring to complex hernias, whether due to factors related to the hernia or the patient. These patients are rarely called for elective surgery and are admitted to the emergency department in a condition that increases morbidity and mortality.

Objective

Discuss the morbidity and mortality associated with the emergency surgical approach to abdominal wall hernia. Present a descriptive analysis of the experience of the General Surgery Service in the emergency surgery of abdominal wall hernia. Highlight the need for the creation of specialized abdominal wall services that can prepare patients for elective surgery, provide the necessary resources for treatment, and train residents and surgeons to manage this pathology.

Methods

Select cases that underwent emergency treatment for abdominal wall hernia over a two-year period through

the analysis of electronic medical records and the service's database. After selection, a review of the medical records will be conducted, analyzing the following variables: gender, age, type and content of the hernia, incarceration time, time between seeking care and surgical approach, technique performed, complications, outcomes, and average length of hospital stay.

Results

We observed that patients undergoing emergency surgery had a high rate of postoperative complications and prolonged hospital stays. In addition to the distress to patients and their families, there is a high social cost, with work interruptions and significant use of hospital resources.

Conclusion

Emergency surgery for abdominal wall hernia is directly related to higher morbidity and mortality and longer hospital stays, highlighting the need to prepare and operate these patients electively.

Video Presentations

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Robotic Incisional Hernioplasty Post–Renal Transplant

Abstract

Introduction

Incisional hernia is a common complication after renal transplantation, influenced by immunosuppression, obesity, infection, and technical factors. Minimally invasive approaches have gained relevance due to reduced wound morbidity and faster recovery. Robotic surgery offers enhanced dexterity and visualization, which may be advantageous in complex cases involving transplanted organs.

Objective

To present a case of robotic incisional hernioplasty in a patient previously submitted to renal transplantation.

Methods

A 47-year-old male with a history of polycystic kidney disease and systemic arterial hypertension underwent living-donor renal transplantation in February 2024. He developed a symptomatic incisional hernia at the transplant site. Computed tomography demonstrated a 4.8 cm fascial defect without signs of incarceration. A robotic-assisted transabdominal preperitoneal (TAPP) repair was performed, with careful dissection to avoid injury to the transplanted kidney and vascular anastomoses. A 15 × 9 cm mesh was positioned in the preperitoneal space and fixed with absorbable sutures.

Results

The procedure was completed without intraoperative complications. The patient had minimal postoperative pain and was discharged on postoperative day two. Follow-up at six months showed no recurrence or complications, and renal graft function remained stable.

Conclusion

Robotic incisional hernioplasty after renal transplantation is feasible and safe in selected patients. The robotic platform may provide technical advantages in complex anatomical scenarios, allowing precise dissection and adequate mesh positioning while preserving graft integrity.

Videoendoscopic Preperitoneal (PeTEP) Repair For Ventral Hernia And Diastasis Recti With Suprapubic Access

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Abstract

Introduction

Minimally invasive surgery for the correction of ventral hernias and abdominal diastasis has evolved considerably in recent years. Various techniques have been described and implemented, each with its own specific nuances and pitfalls. The PeTEP (Preperitoneal Totally Extra-Peritoneal) technique, described by Valenzuela et al., performed exclusively in the preperitoneal space, may reduce complications observed in more established approaches such as Endoscopic Onlay Repair (Endo-OR), Enhanced Totally Extraperitoneal (E-TEP), and Ventral Transabdominal Preperitoneal (TAPP).

Objective

To report and describe the videoendoscopic suprapubic access technique for ventral hernia and abdominal diastasis repair as proposed by Valenzuela (PeTEP).

Methods

A case report supported by surgical video documentation. Data from the patient's medical record and surgical/clinical notes were reviewed and detailed.

Results

A 32-year-old female patient, diagnosed with umbilical hernia and post-pregnancy abdominal diastasis, classified as M3 W1 R0 / D2 T1 according to the European Hernia Society (EHS), underwent PeTEP surgery with inverted plication of the posterior rectus sheath and placement of a large mesh. The procedure was uneventful, with no intraoperative or postoperative complications. The patient was discharged in under 24 hours. At six-month follow-up, there were no recurrences, and the patient's satisfaction was reported as high.

Conclusions

The PeTEP videoendoscopic technique via suprapubic access shows promise as a solid option (in patients without previous cesarean section) for the minimally invasive treatment of ventral hernias and abdominal diastasis, without the need for fascial incisions or extensive dissection. Further studies with larger cohorts are required to assess its applicability and reproducibility on a broader scale.

E-Poster – Case Reports

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Inguinal Hernioplasty In A Case Of Strangulated Inguinal Hernia: Case Report And Technical Considerations

Abstract

Background

Strangulated inguinal hernia is a surgical emergency that requires prompt intervention to prevent intestinal ischemia and necrosis. Laparoscopy, particularly the Transabdominal Preperitoneal (TAPP) approach, has emerged as a valuable alternative to open repair, providing advantages such as reduced postoperative pain and faster recovery. This case report describes the laparoscopic management of an elderly patient presenting with acute symptoms of a strangulated groin hernia and discusses technical considerations relevant to emergency minimally invasive repair.

Case report

An 81-year-old male with a history of neurofibromatosis, colonic diverticular disease, benign prostatic hyperplasia, and heart failure presented with sudden-onset right lower quadrant abdominal pain associated with nausea, vomiting, and rapid enlargement of a known right inguinal hernia. On examination, he was afebrile but in significant discomfort, with a firm, irreducible inguinal mass suggestive of strangulation. Computed tomography revealed gastric distension, air–fluid levels, and small bowel obstruction with a transition point within the hernia.

Emergency laparoscopic exploration was performed under general anesthesia. Three laparoscopic ports were placed, and inspection revealed an incarcerated femoral hernia. Gentle traction and manipulation allowed reduction of the strangulated intestinal loop. Peritoneal dissection was completed to expose the psoas muscle and spermatic cord structures. A segment of small bowel with irreversible ischemia was identified, requiring segmental enterectomy followed by a hand-sewn end-to-end anastomosis. Hernioplasty was completed using a preperitoneal synthetic mesh, and the hernia sac was resected. The postoperative course was uneventful, with early mobilization, adequate pain control, and discharge on postoperative day five.

Laparoscopic repair in the setting of strangulated groin hernia offers several advantages: direct visualization of bowel viability, minimally invasive access, and the ability to perform intestinal resection when required. Current evidence

supports its safety and feasibility, although challenges may arise due to limited working space and difficulty manipulating edematous or incarcerated contents. Successful outcomes depend on surgeon expertise and appropriate intraoperative decision-making.

Conclusion

Laparoscopic TAPP repair represents a safe and effective option for the management of strangulated inguinal hernias, providing benefits such as reduced surgical trauma, less postoperative pain, and faster recovery while maintaining the ability to address associated complications through a minimally invasive approach.

From Pain To Solution: Surgical Reapproach In Chronic Pain After Inguinal Hernia Repair

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Abstract

Introduction

Inguinal hernia repair is one of the most common surgeries, and chronic pain may affect patients undergoing the TAPP technique. Defined as persistent pain lasting more than three months, it significantly impacts quality of life. Treatment can be clinical or surgical, requiring a multidisciplinary approach.

Objective

To report a case of chronic pain after laparoscopic inguinal and umbilical hernioplasty, unresponsive to multimodal analgesia, successfully treated with surgical reapproach.

Case Report

A 44-year-old male patient underwent open bilateral inguinal and umbilical hernia repair, followed by laparoscopic reapproach. He developed progressive upper quadrant pain, worsened by exertion, and associated with a 20 kg weight loss. He underwent staple removal by another surgeon, with partial pain relief. Imaging revealed metallic material in the left inguinal region. The patient was on multimodal analgesia with partial pain control.

A new laparoscopic approach was indicated. During surgery, a meshoma adherent to the inguinal region and left flank, along with multiple metallic clips, was found. The meshoma and 17 clips were removed, and a biodegradable mesh was placed. The patient was discharged on the first postoperative day with significant pain relief and remained asymptomatic after seven months.

Discussion

Chronic post-herniorrhaphy pain remains a clinical challenge. Risk factors include prior hernia repair, pre-operative pain, and hernia sac size. Differential diagnosis involves ruling out hernia recurrence and characterizing the pain. Moderate cases should be treated with multimodal analgesia, while severe cases may require nerve blocks or surgical reintervention.

In this case, pain refractoriness and the presence of metallic surgical material justified reoperation, which resulted in symptom resolution. A multidisciplinary evaluation is crucial for proper management.

Conclusion

An individualized approach is essential in chronic pain after inguinal hernioplasty. Surgical reapproach can provide significant pain relief and improve the patient's quality of life.

Challenge In Repair Of An Incisional Hernia Following En-Bloc Resection Of A Costal Arch Tumor

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Abstract

Case Report

A 34-year-old male patient with a history of HIV infection (undetectable viral load) and class I obesity (BMI 30.9) underwent, at an external institution on December 12, 2019, a right thoracotomy, right costectomy (8th–12th ribs), right phrenectomy, and pleural drainage for a right T9 costal arch tumor measuring 19.8 × 10.5 × 11.3 cm, diagnosed as an aneurysmal bone cyst. After two years, he developed an incisional hernia containing bowel loops and liver, and was reoperated at the same center with placement of a polypropylene mesh in an onlay position on December 1, 2022.

Within three months postoperatively, the patient underwent two wound debridements (January 24 and February 28, 2022) due to surgical-site infection, progressing to wound dehiscence, mesh exposure, and recurrence of the incisional hernia (CT imaging, May 2024).

The first surgical stage consisted of explantation of the previously placed polypropylene mesh on June 28, 2024, with *Pseudomonas aeruginosa* isolated from mesh culture. Subsequently, ultrasound-guided injection of botulinum toxin A (Prosigne® 100 IU) into the transverse abdominal muscle was performed on January 8, 2025, followed by placement of a Tenckhoff catheter on January 24, 2025, for progressive pneumoperitoneum (PPP).

After 14 days, the patient underwent midline laparotomy, bilateral transversus abdominis release (TAR), incisional hernioplasty with polypropylene bridging mesh in the lateral right region, placement of retromuscular polypropylene mesh, right phrenorrhaphy, and placement of retromuscular and subcutaneous drains.

Postoperatively, the patient evolved favorably, without organ dysfunction. He remained in the ICU until postoperative day (POD) 6 with monitored intra-abdominal pressure (maximum 13 mmHg), without clinical or laboratory signs of infection, and was discharged on POD 9. He showed marked improvement of the right thoracoabdominal bulge, regained quality of life, and returned to routine activities without pain complaints.

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Inguinoscrotal Hernia With Ureteral Incarceration: A Case Report

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Abstract

Introduction

Inguinal hernia is a common pathology, affecting 25% of men and 5% of women. Among its rare variations, ureteroinguinal hernia has less than 140 reported cases. Lack of awareness about its existence can increase surgical risks, including section of the ureter and obstructive uropathy.

Case Report

This report the case of a 78-year-old man with increased inguinal bulge for 4 days, hypogastric pain radiating to the inguinal region and constipation. Physical examination revealed an irreducible inguinoscrotal hernia without inflammatory signs. CT scan showed fat, sigmoid, small intestine, ectatic ureter and upstream hydronephrosis. Despite this, renal function was preserved. The patient underwent inguinal hernioplasty using the Lichtenstein technique, with ureter preservation. The patient's recovery was satisfactory and he was discharged on the second postoperative day. Though, the hydronephrosis persisted, requiring follow-up with urology.

Objective

To report a rare case of ureteroinguinal hernia and evaluate the anatomical and functional preservation of the ureter after hernioplasty.

Methods

Review of medical records and comparison with literature via PUBMED.

Results

Computed Tomography identified the ureteroinguinal hernia. The ureter was preserved anatomically, yet there was irreversible loss of function due to chronic incarceration.

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Incisional Lumbar Hernia Repair With Sandwich Technique

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Abstract

Introduction

Incisional lumbar hernias are difficult to repair due to their location and the nearby bone structures. There are multiple techniques for repair, generally including extensive dissection from the 12th rib to the iliac crest, followed by flap mobilization, plication of the sac or fascia, with placement of a prosthesis.

Objective

To describe the results of the sandwich technique in a patient with an incisional lumbar hernia.

Methods

Case report, descriptive observational study with cross section.

Results

A 76-year-old male patient with an L4 W3 R0 incisional hernia, chronic kidney failure in non-dialysis stage and

arterial hypertension. With a history of a right-sided nephrectomy 2 years ago. The complementary studies were carried out and then the surgical intervention consisted of parietal repair with the Sub-Lay and On Lay polypropylene prosthesis placement technique, and the patient was discharged with good progress.

Conclusions

The double mesh technique for the repair of large lumbar hernia defects of the posterior abdominal wall in the elderly adult is an option with good results.

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Complex Ventral Hernia In A Patient With Urinary Diversion

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Abstract

Objectives

To report an approach to treating a large incisional hernia using the modified Pauli technique.

Case Report

A 62-year-old male patient, previously healthy, BMI 29.33, underwent ileocystoplasty associated with the creation of a spiral Monti canal by the Urology team due to high urethral stricture. He developed progressive bulging in the surgical wound area, associated with pain with heaviness and worsening with physical exertion 2 months after the procedure. During the evaluation, a ventral hernia was found with loss of the M3-M5 colon, with a neck measuring approximately 11.3 cm.

Given the complexity of the case, a multidisciplinary discussion was conducted, with the decision to place a

catheter for progressive pneumoperitoneum and administer botulinum toxin preoperatively.

A screening colonoscopy was performed without any pathologies. The patient underwent placement of a Tenckhoff catheter with progressive pneumoperitoneum inflation for six days without complications.

During the hernioplasty procedure, an infraumbilical incision measuring approximately 25 cm was made, with identification and subsequent release of adhesions from the hernia sac and separation of its components. Subsequently, the modified Pauli technique, commonly used in parastomal hernias, was used: the anterior and posterior components were identified and separated from the rectus abdominis muscle, with dissection of the posterior component to the retroperitoneal space in the flanks bilaterally and the space of Retzius inferiorly. Subsequently, Marlex mesh was placed with a continuous suture in the midline and Cooper's ligaments bilaterally, below the rectus abdominis muscle aponeurosis.

The mesh was stapled with a circular stapler, and the Monti canal was exteriorized through a pre-made orifice, passing it transrectally to the left and fixing it in the ipsilateral paraumbilical location. Finally, sutures were performed in layers after relaxing incisions, and a Blake drain was placed over the mesh and posterior rectus abdominis sheath, and a suction drain was placed subcutaneously.

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Advanced Abdominal Wall Reconstruction After Removal Of An Ovarian Tumor With Extensive Invasion

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Abstract

Objectives

To demonstrate the strategy used for abdominal wall reconstruction after resection of tumor with local invasion.

Clinical Case

A 46-year-old female patient, previously hypertensive and diabetic, with a BMI of 24.84, complained of an abdominal mass in the hypogastrium with progressive growth over the past 3 months, associated with local pain and weight loss. An abdominal CT scan revealed a 6.7 x 10.2 x 7.6 cm mass, with bilateral invasion of the rectus abdominis. A local biopsy revealed high-grade serous carcinoma of possible ovarian origin. She underwent a neoadjuvant therapy with Carboplatin and was subsequently referred for surgery.

A panhysterectomy and pelvic dissection were performed, along with excision of the abdominal wall mass with widened margins. During reconstruction, an aponeurosis and peritoneum defect measuring approximately 10 x 15 cm was observed, and the decision was made to fix the Phasix ST mesh in the neoperitoneum position and the Marlex mesh onlay. A lower abdominal displacement flap was placed with umbilical repositioning. A suction drain was placed in the subcutaneous plane. The patient's wound progressed well postoperatively, and the drain was removed on the 7th postoperative day. The patient developed a wall seroma, requiring a puncture for drainage. A cycle of adjuvant chemotherapy was performed without complications. The patient is currently undergoing clinical and radiological follow-up with the gynecology-oncology team. Evaluated 9 months after the procedure, the patient showed no evidence of bulging or herniation on physical examination, and the surgical wound was completely healed. The patient continued to perform daily activities normally.

Patient Combined Rives-Stopppa And Dermolipectomy Approach

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Abstract

Background

Incisional hernias in Pfannenstiel scars present a diagnostic challenge in obese patients, as they can remain concealed within the adipose pannus, making clinical identification difficult. Bladder slippage into the hernia sac, though rare, may cause urinary symptoms and complications if not diagnosed early.

Aim

To report a case of incisional hernia with bladder slippage in an obese patient, emphasizing the importance of imaging for diagnosis and the combined surgical approach to optimize both functional and aesthetic outcomes.

Case Report

A 66-year-old hypertensive, obese female patient with a history of multiple abdominal surgeries presented with a sensation of hypogastric bulging and local discomfort. Physical examination was inconclusive due to obesity. Computed tomography revealed an incisional hernia through a Pfannenstiel scar with bladder slippage, measuring 10 cm. Abdominal wall reconstruction with a retromuscular mesh (Rives-Stopppa technique) was performed. Due to the large dermocutaneous flap, a dermolipectomy was carried out in collaboration with the Plastic Surgery team. The postoperative course was uneventful.

Conclusions

Incisional hernias in Pfannenstiel scars in obese patients can be clinically occult, making computed tomography

essential for diagnosis and surgical planning. Retromuscular repair provided a safe and durable reconstruction, while dermolipectomy contributed to improved aesthetic and functional results. A multidisciplinary approach is crucial to minimize complications and optimize outcomes in these challenging cases.

Large Epigastric Hernia Complicated With A Pressure Ulcer And Infestation

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Abstract

Background

Epigastric hernia is a defect of the anterior abdominal wall, characterized by the protrusion of fat, usually a peritoneal sac, through the decussation of the rectus sheath fibers in the linea alba between the umbilicus and the xiphoid process.

Aim

To report the contraindication of prosthetic repair in hernias complicated with infestation.

Case Report

A 38-year-old patient was admitted to the Emergency Department with a 17-year history of a progressively growing epigastric tumor. One week prior to admission, he presented with stabbing pain, nausea, and vomiting. He denied holding stool or gas. Physical examination revealed an epigastric tumor with local inflammatory changes due to skin necrosis, pressure ulcers, and myiasis, approximately 20 cm in diameter, with a solid, elastic, and non-reducible consistency. A plain abdominal CT scan

revealed a transverse defect measuring 8 cm in diameter. Necrotic tissue was debrided, and the hernial sac was dissected from the greater omental contents. The defect was found to be 8 cm in diameter. After extensive lavage, the midline was closed using the Small Bites technique. During his hospitalization, he received antibiotic therapy and ivermectin for the myiasis. She progressed well and was discharged.

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Therapeutic Strategy In A Patient With Complex Ventral Hernia With Loss Of Domain And Complicated Acute Appendicitis: A Case Report

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Introduction

Complex ventral hernias with loss of domain represent a significant surgical challenge, particularly when associated with acute intra-abdominal conditions such as complicated appendicitis. In such cases, a staged and cautious approach is crucial to prevent severe complications like open abdomen and to enable a safe and effective hernia repair.

Case Presentation

A 51-year-old male presented to the emergency department with a one-day history of right iliac fossa pain, associated with nausea, anorexia, and fever of 38°C. Past medical history Smoker: 39 pack-years; Prior surgeries: 2015: Open cholecystectomy, 2017: Umbilical

herniorrhaphy, 2018: Recurrent umbilical herniorrhaphy (primary repair without mesh and segmental enterectomy due to strangulation).

On examination, the patient was in good general condition. Abdominal inspection revealed a right subcostal and midline transumbilical scar, a large non-reducible ventral hernia, and erythema over the mesogastrium, hypogastrium, and right iliac fossa with localized tenderness.

Abdominal CT scan showed a large ventral hernia with a 15 cm neck, fat stranding adjacent to the cecum and ascending colon, interspersed fluid collections, and an enlarged appendix. The hernia sac volume-to-abdominal cavity volume ratio was 50%.

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Traumatic Abdominal Wall Hernia In The Emergency Setting: A Case Report

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Abstract

A 21-year-old male patient presented to the emergency department after falling from a bicycle, sustaining direct impact to the right iliac fossa (RIF). He was hemodynamically stable and reported localized pain. Physical examination revealed a bulge in the RIF, more evident with the Valsalva maneuver and non-tender on palpation. Computed tomography (CT) demonstrated localized soft-tissue swelling with a 3.1 × 2.8 cm defect containing small bowel loops, without signs of obstruction or

additional intra-abdominal injuries. Based on the trauma mechanism and imaging findings, a diagnosis of traumatic abdominal wall hernia (TAWH) was established. As the patient remained asymptomatic and stable, conservative management was chosen, with no indication for exploratory laparotomy at that moment.

TAWH is an uncommon consequence of blunt trauma, and its optimal management—particularly regarding the timing of surgical repair and the use of synthetic mesh—remains debated due to limited evidence and few reported cases. Therapeutic decisions should consider clinical and hemodynamic stability, CT severity grading, associated injuries, and surgeon expertise. In this case, the lesion was classified as grade I according to Dennis et al., indicating a low-severity defect without visceral compromise. This supported the decision for conservative treatment in the acute setting, with delayed elective repair. Surgical intervention, when indicated, aims to rule out occult visceral injury and prevent complications such as incarceration or strangulation.

TAWH is a rare injury that must be suspected in patients with blunt abdominal trauma and localized abdominal wall pain or swelling. CT plays a key role in diagnosis, classification, and therapeutic planning. This case illustrates the safety and appropriateness of conservative management in stable patients, followed by elective surgical repair.

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Complex Ventral Hernia Repair With Abdominal Wall Reconstruction And Dermolipectomy

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Abstract

Objective

To report the experience of performing a complex ventral hernia repair associated with abdominal wall reconstruction and dermolipectomy in a case of a large epigastric hernia with complications.

Case Report

A patient admitted through the emergency department presented signs of intestinal subocclusion caused by a large-volume epigastric hernia. After being referred for hospitalization, a computed tomography scan of the abdomen revealed an extensive hernia containing intestinal loops, visceral fat, the pancreatic head, and marked fluid distension of the duodenum within the hernia sac, in addition to loss of domain, which explained the subocclusive condition. Following volumetric evaluation and due to the magnitude of the hernia, the general surgery team opted to perform preoperative pneumoperitoneum with catheter placement to prepare for the surgical approach. During the ventral hernia repair, a significant aponeurotic defect and adhesions involving the stomach, duodenum, and colon to the hernia sac were identified. These structures were released, followed by abdominal wall and midline reconstruction, complemented by dermolipectomy to optimize both functional and aesthetic outcomes.

Discussion

This case highlights the complexity of managing large ventral hernias, especially when associated with complications such as intestinal subocclusion and involvement of critical structures like the duodenum and pancreatic head. The presence of loss of domain reinforces the need for detailed surgical planning, including techniques such as pneumoperitoneum, to reduce intraoperative risks and improve outcomes. A multidisciplinary approach and the use of preoperative resources were essential for the success of the procedure.

Conclusions

This report underscores the importance of early and individualized evaluation of patients with complex hernias, demonstrating the challenges in managing cases with loss of domain and atypical hernia content. It also reinforces the relevance of tailored surgical strategies to ensure safety and effectiveness in treatment.

Inguinal Hernioplasty With Posterior Wall Reconstruction And Right Orchiectomy

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Abstract

Objective

To report the experience of performing inguinal hernioplasty associated with posterior wall reconstruction and right orchiectomy in a case of a large, complicated inguinal hernia.

Case Report

A patient admitted for inguinal hernia repair initially underwent catheter placement for pneumoperitoneum induction, aiming to prepare the surgical field. Five days later, an inguinal hernioplasty was performed to treat a massive hernia. During the procedure, an extensive hernia sac was identified within the scrotal sac, with loss of domain, containing small bowel loops, the right colon, and a significant hydrocele. Upon beginning dissection of the spermatic cord components, a right orchiectomy was performed due to the high risk of testicular necrosis under intraoperative conditions. The surgery continued with resection and closure of the hernia sac, followed by placement of a preperitoneal mesh in the Stoppa space. Posterior wall reconstruction was completed using the Lichtenstein technique, with mesh fixation to the inguinal ligament and conjoint tendon, restoring anatomic integrity.

Discussion

This case illustrates the importance of individualized surgical approaches, particularly in large hernias with loss

of domain. The presence of atypical hernia contents, such as the colon and hydrocele, and the need for intraoperative decisions like orchiectomy highlight the complexity of management and the relevance of pre-operative planning, including the use of pneumoperitoneum. These choices reflect the balance between functional preservation and patient safety, emphasizing that extensive hernias require adapted strategies to minimize complications and optimize outcomes.

Conclusion

This report reinforces the need for detailed and individualized evaluation of patients with complex inguinal hernias, especially those with loss of domain and diverse hernia contents. The combined approach using Lichtenstein and Stoppa techniques demonstrates effectiveness in anatomic reconstruction, while intraoperative decisions such as orchiectomy underscore the importance of adaptability to ensure favorable surgical outcomes.

De Garengeot Hernia: Case Report and Epidemiological Aspects

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Abstract

Rare femoral hernia containing the appendix with distal ischemia was managed via inguinoscopy with appendectomy and McVay repair, with good outcome; emphasizes early diagnosis and tailored surgical management.

E-Poster – Original/Review

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Guimarães Meirelles¹, Geórgia
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Proposal For A Multicenter Randomized Clinical Trial Comparing Robotic Versus Laparoscopic Surgery In Patients With Inguinal Hernia

Abstract

Introduction

In accordance with the evidence available in the literature, only the RIVAL 2020 study and the 1- and 2-year follow-up in 2023 evaluated, using the Randomized Clinical Trial research model, the comparison of robotic and laparoscopic procedures in the evaluation of patients with inguinal hernia. Although robotic inguinal hernia repair shows an increase in the indication for this procedure, the advantage in short and long-term follow-ups at a high level of evidence has not yet been demonstrated when compared to the laparoscopic method.

Objective

To present a proposal for conducting a Multicenter Randomized Clinical Trial comparing Robotic Surgery versus Laparoscopic Surgery in patients with Inguinal Hernia.

Methods

To gather surgeons with proven experience in both surgeries, who work in services offering both procedures, and who are interested in participating, following previously established guidelines, in accordance with the conduct of the randomized clinical trial research model based on the Consolidated Standards of Reporting Trials. Registration with the Ethics Committee and the Brazilian Registry of Clinical Trials.

Results

Proposal for acceptance.

Conclusion

The proposal to conduct this randomized clinical trial is based on the understanding that increasing the sample size may significantly show a difference between the methods, if such a difference exists.

Can Botulinum Toxin A Prevent The Need For Component Separation In Midline Ventral Hernia Repair?

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Abstract

Background

Ventral hernias are a frequent complication following abdominal surgery and may present significant technical challenges, particularly in patients with large incisional defects. To enhance fascial closure rates, several surgical techniques have been developed, including external oblique release and transversus abdominis release. Although effective, these approaches modify the native anatomy of the abdominal wall and are associated with increased wound morbidity and the risk of failure of the repair. In recent years, preoperative injection of botulinum toxin type A (BTA) has emerged as a modality for chemical component separation—or, more precisely, chemical relaxation of the abdominal wall musculature—facilitating primary midline closure in complex ventral hernias.

Aim

The objective of the present study is to evaluate whether the use of BTA contributes to improved abdominal wall compliance, thereby enhancing Carbonell's index and reducing the need for mechanical component-separation techniques during ventral hernia repair.

Methods

In this study, statistical analysis was performed using the Student's t-test to compare rectus muscle width before and after BTA administration.

Results/Conclusion

A significant increase in rectus width was observed post-injection ($p < 0.05$; $p = 0.0059$), indicating effective muscular relaxation.

Comparison Of Postoperative Prognosis Of Abdominal Hernias: Laparoscopic Versus Conventional Open Approach

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Abstract

Introduction

Abdominal hernias result from the abnormal protrusion of tissues or organs through the abdominal wall. Laparoscopic surgery, being minimally invasive, has shown several advantages over the open technique. Postoperative prognosis depends on the incidence of complications, and evaluating clinical outcomes is essential to determine the optimal surgical approach.

Objective

To compare the postoperative prognosis of laparoscopic versus conventional open techniques in the surgical treatment of abdominal hernias.

Methods

This systematic review was conducted using PubMed, SciELO, and Cochrane databases with the following indexed MeSH/DeCS terms: "Laparoscopy" AND ("Abdominal Hernia" OR "Abdominal Wall Hernia"). Studies published in full over the last five years, in Portuguese, English, or Spanish, including meta-analyses, clinical trials, and cohort studies, were included. A total of 200 eligible publications were identified, of which 20 were selected, and 6 were included in the final descriptive analysis.

Results

The analysis demonstrated that the choice of surgical approach for abdominal hernia repair should consider patient-specific factors and the surgeon's expertise, as laparoscopic procedures require a steeper learning curve and higher initial costs. Nevertheless, laparoscopic repair was associated with shorter hospital stays, lower rates of chronic and postoperative pain, faster return to work, better cosmetic outcomes, and a reduced incidence of postoperative complications, including fewer surgical site infections, when compared to the open technique. Hernia recurrence rates were similar between the two approaches. However, the mean operative time was longer in the laparoscopic group.

Conclusion

Recent studies indicate that laparoscopic repair is a safe and equally effective alternative to conventional open surgery, offering significant postoperative benefits to patients.

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Postoperative Complications In Hernia Surgery: Risk Factors And Prevention Strategies

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Abstract

Introduction

Hernia repair is a common surgical procedure aimed at relieving symptoms and preventing complications associated with the condition. Although generally effective, it can lead to postoperative complications such as chronic pain, seroma formation, and surgical site infection. These risks are heightened in patients with comorbidities such as diabetes and hypertension, as well as lifestyle factors like obesity and smoking.

Objective

To evaluate postoperative complications in patients undergoing hernia surgery, analyzing associated risk factors and prevention strategies.

Methods

An integrative literature review was conducted using the Lilacs and Medline databases via the Virtual Health Library (VHL). The search strategy used the descriptors

“postoperative complications” AND “hernia”. Full-text articles published in Portuguese, English, and Spanish between 2020 and 2025 were included. A total of 114 eligible publications were identified, of which 21 were selected for descriptive analysis.

Results

Hernias were more frequently observed in individuals over 40 years of age, with a slight male predominance, particularly in inguinal hernias. Incisional hernias were more common in women. Overall surgical outcomes were favorable, with most patients experiencing an uneventful recovery. The most frequent complications included seroma, wound infection, hematoma, and, occasionally, the need for surgical reintervention. In rare cases, temporary open abdomen management was required, which increased the risk of mesh infection or rejection and was associated with higher rates of chronic postoperative pain. Technical analysis revealed worse outcomes with the Onlay approach compared to Rives-Stoppa, while the Sublay technique showed a higher incidence of seroma formation.

Conclusion

Most hernia surgeries result in favorable outcomes, with complications being relatively uncommon and typically mild. Identified risk factors include sex and age, particularly in women over 40. The most prevalent complications are seroma, local infection, hematoma, and rarely, reoperation. Understanding these risk factors is essential for improving postoperative care, preventing adverse outcomes, and enhancing overall patient recovery.

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Minimally Invasive Repair Of Ventral Hernia, An “Alphabet Soup”: A Comprehensive Review

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Abstract

Background

Hernias currently affect up to 25% of the Brazilian population. Minimally invasive treatment techniques are still used by a minority. The improvement and advantages of these modalities have been gaining ground, leading to progressive growth. However, the diversity of procedures and techniques means that a series of names and acronyms need to be mastered by surgeons and sometimes they are not.

Aim

To perform a comprehensive review of the nomenclature and acronyms of minimally invasive techniques for the treatment of ventral hernias.

Method

Literature review through digital platforms including publications from the last 10 years that contain descriptors related to minimally invasive ventral hernia repair.

Results

Five terms and/or acronyms generally requested in the procedures were found. For example: minimally invasive ventral hernia mesh surgery (MIVHMS) and laparoscopic ventral hernia repair (LVHR). In addition, 35 terms were found to describe the techniques used in the treatment of the disease, such as: intraperitoneal mesh onlay (IPOM), totally extraperitoneal enhanced vision (ETEP) and robotic release of the transversus abdominis (robo-TAR).

Conclusions

The nomenclature involved in minimally invasive ventral hernia repair is diverse. Being aware of this “alphabet soup” is essential for the surgeon. It will help in understanding, studying and deciding which is the best technique for each case.

Repair Of Incisional Hernia, Rectus Diastasis, And Abdominoplasty

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Abstract

Introduction

Incisional hernia repair, in some cases, requires a necessary abdominoplasty to manage the significant excess dermcutaneous tissue and the subsequent midline plication for the diastasis of the rectus muscles.

Objective

To report the results of abdominoplasty in patients with abdominal wall hernias and diastasis rectus muscles.

Method

Case report, descriptive, cross-sectional observational study.

Results

A 50-year-old patient diagnosed with an M4W2R0 incisional hernia, diastasis, and marked lipodystrophy underwent wall repair using the Rives technique, followed by abdominoplasty with a fleur-de-lis incision and neoumbilicus. The patient was discharged with good progress. Six-month follow-up revealed no recurrence.

Conclusion

The combination of parietal repair and abdominoplasty is a valid option with excellent results, even more so when there is abundant dermcutaneous tissue, which must be resected, for better aesthetic results and comfort for the patient.



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