ISW26-195-01 (0877)

DESIGN, IMPLEMENTATION, AND EVALUATION OF AN INDIGENOUS KNOWLEDGE HEALER-DELIVERED SCREENING FOR DIABETES AND FOOT INFECTIONS IN RURAL SOUTH AFRICA

T. MacQuene[1], N. Tshabalala[1], N. Mkize[2], N. Sangana[3], B. Majikela-Dlangamandla[4], P. Mhlatyelwa[5], L. Hirschhorn[6], K. Chu[1]

[1]Stellenbosch University, Surgical Sciences, Cape Town, South Africa

[2]Stellenbosch University, Surgical Sciences, East London, South Africa

[3]University of Texas Southwestern Medical Center, Department of Global Health, Dallas, United States

[4]University of Cape Town, Division of Diabetic Medicine and Endocrinology, Cape Town, South Africa

[5]Stellenboch University, Surgical Sciences, East London, South Africa

[6]Northwestern University, Department of Medical Social Sciences, Chicago, United States

Introduction:
South Africa (SA) has the highest diabetes mellitus (DM) prevalence in Africa. Indigenous Knowledge Healers (IKH) may serve as intermediaries to fill this gap and improve DM and foot infection management. This study aimed to design, implement, and evaluate the implementation outcomes of a pilot DM detection intervention using IKHs in rural SA.

Material and Method:
We conducted a mixed-methods study on IKH-led screening and referral of clients with suspected DM to formal healthcare in rural SA. DM education and training were followed by the intervention of IKHs screening and referring DM clients, and the implementation outcome evaluations. Outcomes were assessed using qualitative and quantitative data.

Results:
199 screenings were conducted and 66 referrals made. Thirty-six IKHs were trained but only 1/3 actively adopted the intervention largely due to difficulties integrating screening into routine consultations and identifying eligible clients. To address workflow issues, some IKHs introduced student healers to assist with screening activities. Acceptability was limited by mistrust of community members being referred to the formal health sector. This was mitigated through community sensitisation and stakeholder engagement with clinics and community leaders. Fidelity was initially limited by literacy-related challenges in completing screening tools and documentation, but regular refresher training and supervision improved tool use.

Conclusion:
Community based screening by IKH of DM is a strategy to reach clients who do not typically use formal health care. Sustainability will be conditional on collaboration with clinics, ongoing supervision, and access to supplies.

ISW26-195-02 (0360)

EVALUATION OF OUTCOMES OF eTEP(EXTENDED TEP) VS TAPP: A RANDOMIZED CONTROLLED TRIAL IN TERTIARY CARE INSTITUTE OF EASTERN INDIA

M. Kumar[1], *S. Nandi*[1], *A. Jha*[1]
[1]*All India Institute of Medical Sciences, General Surgery, Patna, India*

Introduction:
Inguinal hernia repair is one of the most commonly performed surgeries worldwide, particularly in males. Minimally invasive techniques like Transabdominal Preperitoneal (TAPP) repair have been widely adopted due to reduced postoperative pain and quicker recovery. The Extended Totally Extraperitoneal (eTEP) technique, a newer evolution of the TEP approach, offers enhanced visualization, ergonomic port placement, and avoids peritoneal entry. However, comparative evidence between eTEP and TAPP, especially from Indian tertiary centers, remains limited. Aim and Objectives: To compare eTEP and TAPP in terms of operative time, and assess differences in surgeon workload, postoperative pain, patient comfort, complication rates, hospital stay, and hernia recurrence.

Material and Method:
This randomized controlled non-inferiority trial was conducted at AIIMS Patna over one year. Seventy-two male patients with uncomplicated inguinal hernias were randomized equally into eTEP (n=36) and TAPP (n=36) groups. Bilateral hernias were counted as separate procedures, yielding 81 cases. Data on operative time, NASA Task Load Index (surgeon workload), Visual Analog Scale (VAS) for pain, Carolina Comfort Scale (CCS), surgical site occurrences (SSOs), hospital stay, and recurrence (at 3 and 6 months) were collected and analyzed.

Results:
eTEP had a significantly shorter operative time (63.5 ± 11.1 vs. 82.1 ± 25.5 min; $p<0.001$). Surgeon workload was lower with eTEP. Postoperative VAS and CCS scores favored eTEP at 48 hours and 1 week. SSOs and hospital stay were similar. No recurrences were noted in either group at 6 months.

Conclusion:
eTEP is a safe, efficient, and ergonomically superior alternative to TAPP for inguinal hernia repair, supporting its broader clinical use.

ISW26-195-03 (0311)

VENOUS THROMBOEMBOLISM RISK ASSESSMENT IN ASIAN SURGICAL PATIENTS: SHOULD IT DIFFER FROM WESTERN POPULATION?

L. Lee[1], *N. Liew*[2]
[1]*University of Malaya, Surgery, Kuala Lumpur, Malaysia*
[2]*Universiti Putra Malaysia, Surgery, Serdang, Malaysia*

Introduction:
Rising trend of venous thromboembolism (VTE) incidence in Asia has called for improved risk assessment and thromboprophylaxis. Caprini risk assessment model (RAM) is widely used among Western population but its applicability in Asia remains contentious. This study aims to compare efficacy of VTE risk assessment between Caprini model and the new model based on local factors.

Material and Method:
VTE risk factors were retrospectively identified for 4206 surgical inpatients in a tertiary hospital in Malaysia. Logistic regression was used to compute the risk factors and levels odds ratios (OR) for VTE within 90 days of hospitalisation. Receiver operating characteristics curves were performed to determine the area under curve (AUC) for both RAMs.

Results:
Incidence of VTE was 0.5%; by risk level: Caprini RAM - low, 0.16%; moderate, 0.37%; high, 2.12%; New RAM – low, 0.09%; moderate, 1.91%; high, 3.47%. Age 40-60 (OR = 11.39; 1.93 – 67.08), age >60 (9.12; 1.46 – 57.04), pregnancy (118.83; 8.78 – 1608.4), obesity, BMI ≥30 (18.06; 2.91 – 112.20), history of prior VTE (172.34; 37.05 – 801.52) and thrombophilia (714.12; 7.62 – 66886.4) were significantly associated with VTE. New RAM moderate (16.49; 4.45 – 61.17) and high (18.27; 3.79 – 87.98) risk level yielded markedly higher odds ratio than Caprini high risk (5.97; 2.13 – 16.69). AUC difference between Caprini (0.795) and new RAM (0.849) was statistically significant, P = 0.004.

Conclusion:
VTE incidence in Asian surgical patients is low. The new RAM using Asian VTE guidelines has better VTE risk assessment efficacy than Caprini's.

ISW26-195-04 (0846)

GENDER DIFFERENCES IN DIAGNOSIS AND PERIOPERATIVE OUTCOMES AMONG ADULT PATIENTS WITH ACUTE APPENDICITIS

J. Baz Gallego[1], *J. Barros Sosa*[1], *J. Principe*[1], *S. Bertona*[1], *F. Schlottmann*[1]
[1]*Hospital Aleman, General Surgery, Buenos Aires, Argentina*

Introduction:
Acute appendicitis (AA) is the most prevalent surgical emergency worldwide, with a lifetime risk estimated between 7% and 9%. Numerous studies have examined various aspects of AA, including its physiopathology, diagnosis, and treatment options. However, there is limited data addressing differences between patients' gender, and most of the evidence includes pediatric population with a small number of patients.

Material and Method:
Consecutive patients undergoing surgery for acute appendicitis between 2006 and 2023 were included. The cohort was divided into two groups according to biological sex: female sex (FS) and male sex (MS). Demographic, surgical, and postoperative variables were compared.

Results:
A total of 2,860 patients were included (47.7% female, 52.3% male). Males had higher rates of hypertension (6.8% vs. 9.7%, p=0.003), coronary disease (0.8% vs. 2.3%, p=0.005), and diabetes (1.7% vs. 2.8%, p=0.04). Time to consultation was similar (40.5 vs. 40.2 h, p=0.91). Diagnosis was mainly by ultrasound (70.9% vs. 71.8%, p=0.55), followed by CT (25.2% vs. 24%, p=0.46). Males showed more complicated appendicitis (24.4% vs. 20.9%, p=0.02) and longer operative time (60 vs. 56 min, p<0.001), while normal appendix was more frequent in females (6% vs. 2.1%, p<0.001). In normal appendix cases, CT use was lower (12.3% vs. 87.7% US, p=0.002). Postoperative infection (1.6% vs. 2.4%, p=0.12), morbidity (13% vs. 13.4%, p=0.68), major morbidity (4.3% vs. 2.7%, p=0.53), abscess (3.6% vs. 4.7%, p=0.15), and hospital stay (1.6 vs. 1.7 days, p=0.46) were similar. No mortality occurred.

Conclusion:
Higher negative appendectomy rates in females highlight the need for increased CT use to improve accuracy, outcomes

ISW26-195-05 (0654)

FACTORS ASSOCIATED WITH MORTALITY IN PATIENTS WITH ILIOPSOAS ABSCESS

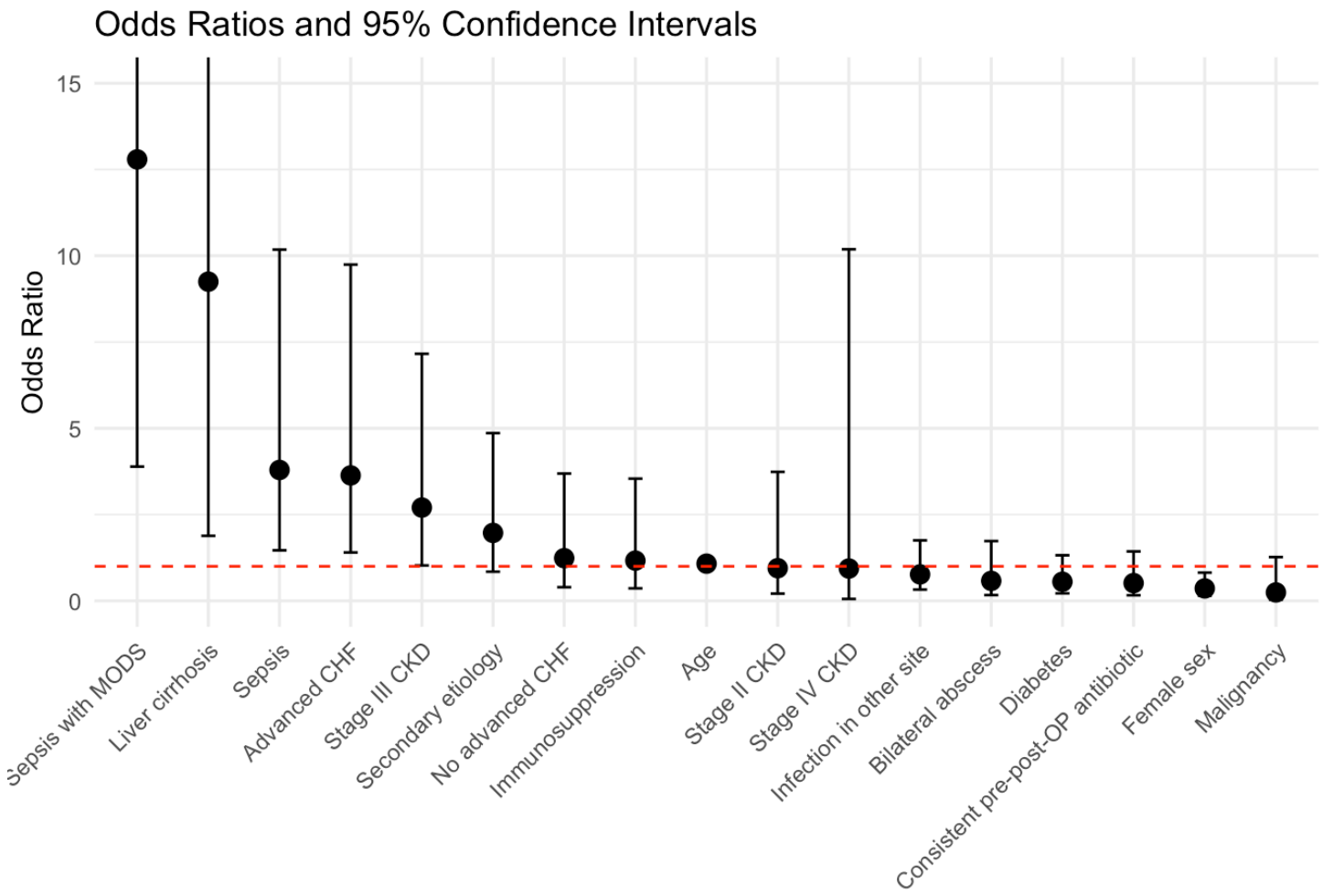
D. Skicko[1], *I. Degtjarjovs*[2], *A. Jezupovs*[1]
[1]*Riga East University Hospital, Riga, Latvia*
[2]*University of Latvia, Riga, Latvia*

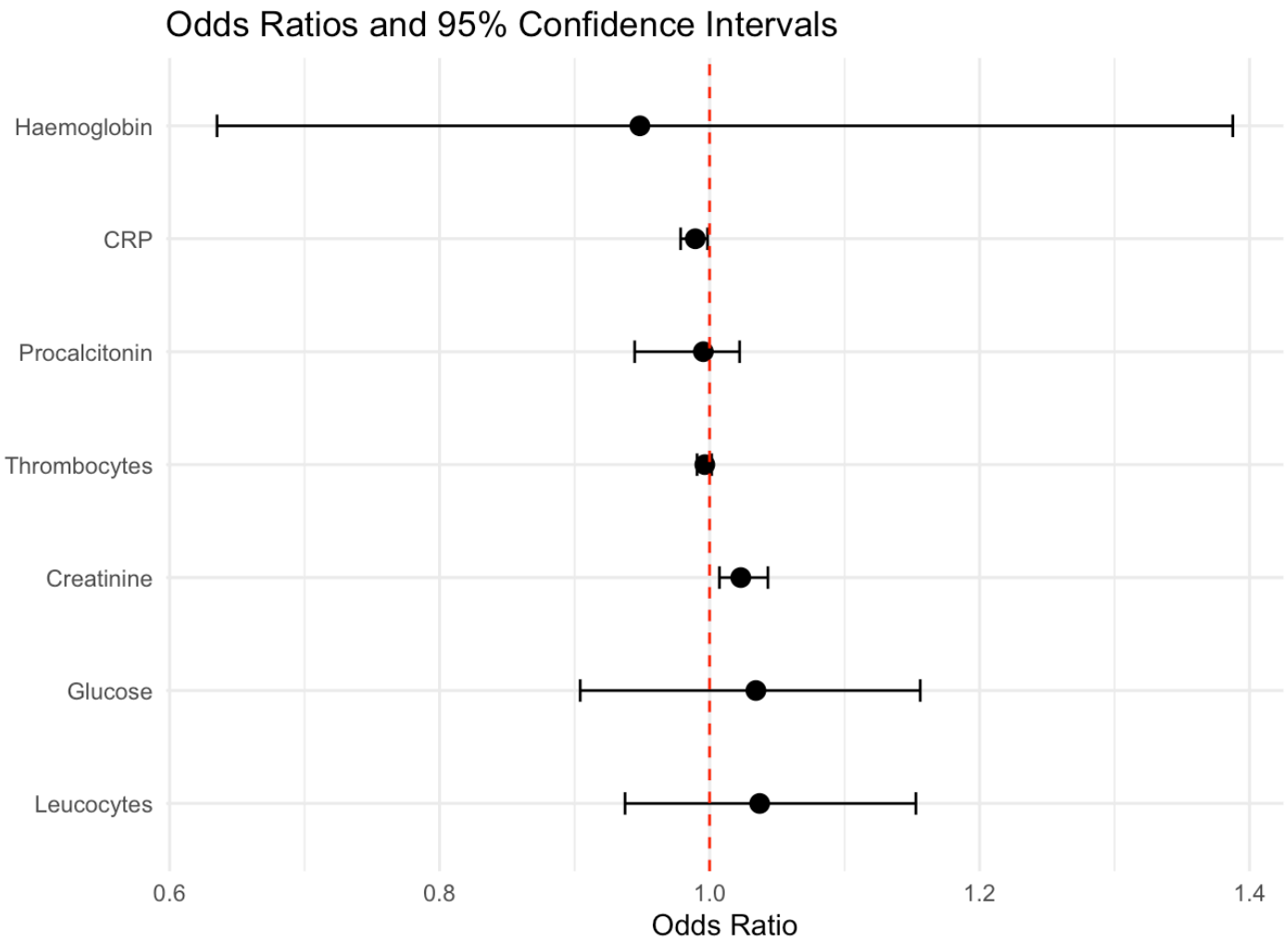
Introduction:
Iliopsoas abscess is a severe retroperitoneal infection with high morbidity and mortality. Identifying clinical and laboratory predictors of outcomes is essential for improving prognosis.

Material and Method:
A retrospective cohort study included patients treated for iliopsoas abscess at Riga East University Hospital, Latvia from 2011 to 2024. Clinical, demographic, and laboratory data were analyzed using univariate and multivariable logistic regression analysis to identify factors associated with mortality.

Results:
Among 239 patients, univariate analysis identified age, sepsis, CKD, advanced CHF, pulmonary disease, anaemia, thrombocytopenia, and elevated creatinine as associated with higher mortality ($p < 0.02$). In multivariable logistic regression analysis, older age (OR 1.08, 95% CI 1.04–1.13, $p < 0.001$), sepsis (OR 3.79, 95% CI 1.46–10.18, $p = 0.007$), sepsis with MODS (OR 12.79, 95% CI 3.89–45.45, $p < 0.001$), renal disease stage III (OR 2.70, 95% CI 1.03–7.16, $p = 0.043$), liver cirrhosis (OR 9.25, 95% CI 1.88–47.76, $p = 0.006$), and advanced CHF (OR 3.63, 95% CI 1.40–9.74, $p = 0.009$) were independently associated with increased mortality. Among laboratory parameters, elevated creatinine (OR 1.02, 95% CI 1.01–1.04, $p = 0.010$) was associated with increased mortality, while higher C-reactive protein (CRP) was associated with decreased mortality (OR 0.99, 95% CI 0.98–1.00, $p = 0.037$).

Conclusion:
Older age, sepsis (especially with MODS), liver cirrhosis, elevated creatinine, advanced renal disease and CHF failure were independent predictors of increased mortality in patients with iliopsoas abscess. Early identification and management of these risk factors may improve patient outcomes.


Odds Ratios and 95% Confidence Intervals
Odds Ratio
15
10
5
0
Sepsis with MODS
Liver cirrhosis
Sepsis
Advanced CHF
Stage III CKD
Secondary etiology
No advanced CHF
Immunosuppression
Age
Stage II CKD
Stage IV CKD
Infection in other site
Bilateral abscess
Diabetes
Consistent pre-post-OP antibiotic
Female sex
Malignancy


Odds Ratios and 95% Confidence Intervals
Haemoglobin
CRP
Procalcitonin
Thrombocytes
Creatinine
Glucose
Leucocytes
0.6
0.8
1.0
1.2
1.4
Odds Ratio

ISW26-195-06 (0595)

DELIRIUM IN OLDER ADULTS UNDERGOING OPEN VERSUS MINIMALLY INVASIVE CHOLECYSTECTOMY: AN ANALYSIS OF THE 2022 NATIONAL INPATIENT SAMPLE

C. Nobuhara[1], *L. Tennakoon*[1], *M. Berger*[2], *J. Forrester*[3]
[1]*Stanford University, General Surgery, Stanford, United States*
[2]*Stanford University, Anesthesiology, Stanford, United States*
[3]*Stanford Unviersity, General Surgery, Stanford, United States*

Introduction:
Delirium is a common postoperative complication in older adults undergoing emergency general surgery and is associated with increased rates of dementia and one-year mortality. With an aging population worldwide, cholecystectomy in patients ≥65 years is common, yet we do not understand the effect of minimally invasive surgical approaches on delirium risk.

Material and Method:
We conducted a retrospective cohort study of adults aged ≥65 years using the 2022 National Inpatient Sample. Diagnoses of cholecystitis and delirium were identified using ICD-10 codes. Cholecystectomy was classified by ICD-10-PCS codes as open, laparoscopic, or robotic-assisted. Survey weights were applied to generate national estimates.

Results:
In this comparative analysis of 50,200 weighted older adults (≥65 years) hospitalized with cholecystitis, 13,172 (26%) underwent minimally invasive (laparoscopic or robotic) surgery, 3,574 (7%) underwent open surgery, 33,453 (67%) received non-operative management. Delirium occurred in 71 (2%) patients undergoing open cholecystectomy, compared to 132 (1%) in the minimally invasive group (p=0.01). In our multivariate model, laparoscopic and robotic surgery showed a reduced risk for delirium (aOR = 0.61, 95% CI: 0.89-1.10, p = 0.13) while patients who underwent open surgery had significantly higher odds of delirium (aOR 2.26; 95% CI: 1.16-4.39, p = 0.01). Open procedures were associated with higher mean hospitalization costs than laparoscopic procedures ($43,530 vs $21,205, p=0.002). These findings suggest increased rates of delirium and greater resource utilization in older adult patients undergoing open cholecystectomy.

Conclusion:
Among older adults hospitalized with cholecystitis, minimally invasive cholecystectomy may be associated with lower rates of delirium compared to open surgery.

Figure 1. Forest plot of factors associated with delirium.

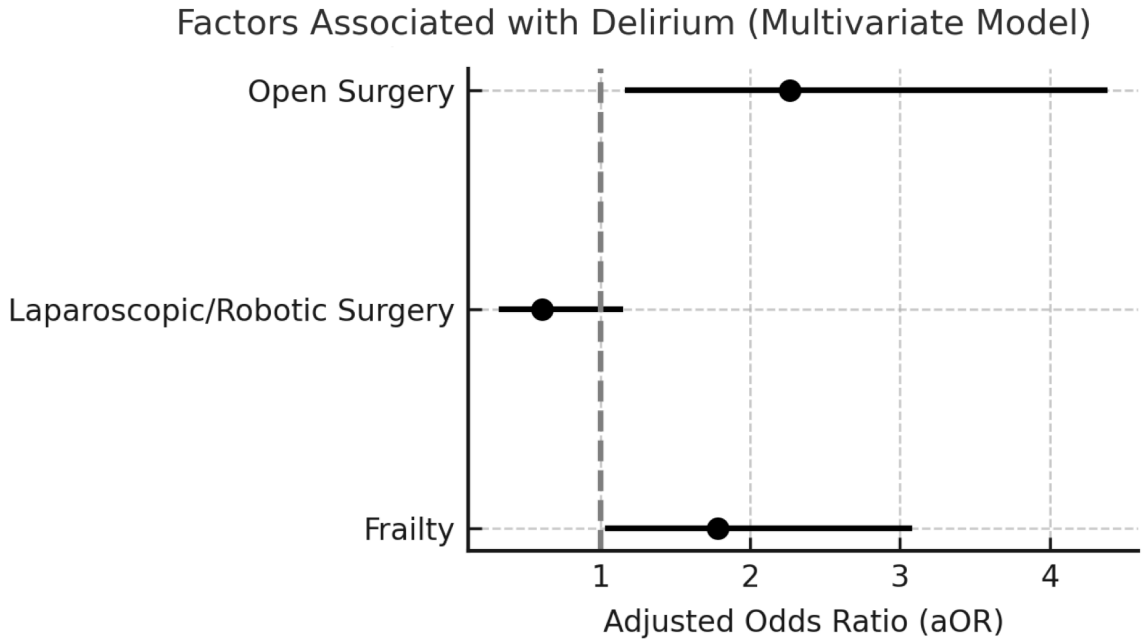


Table 1. Patient characteristics and outcome by surgery type.

	Minimally Invasive Surgery (n=13,172.4)	**Open Surgery** (n=3,574.2)	**Non-Operative** (n=33,453.2)	**p-value**
Mean Age (years)	75.3	74.4	77.6	<0.001
Gender				0.54
Males	58%	59%	57%	
Females	42%	41%	43%	
Race (majority)				<0.001
White	74%	76%	72%	
Frailty (%)	7%	6%	14%	<0.001
In-Hospital Mortality (%)	1%	7%	9%	<0.001
Mean Length of Stay (days)	5.2	10.0	8.6	<0.001

ISW26-195-07 (0301)

EVALUATION OF THE LONG-TERM EFFECTS OF INTRAOPERATIVE USE OF A CARRIER-BOUND FIBRIN SEALANT (TachoSil®). SHOULD WE CONTINUE USING IT? A RETROSPECTIVE STUDY

I. Di Carlo[1], *L. Gallo*[1], *M. Rapisarda*[1], *A. Toro*[2]
[1]*University of Catania, Department of Surgical Sciences and Advanced Technologies "G.F. Ingrassia", Catania, Italy*
[2]*University of Catania, Department of Surgery, Catania, Italy*

Introduction:
This study analyses the long-term effects of a carrier-bound fibrin sealant (CBFS) after abdominal surgery by following up patients years after application.

Material and Method:
Sex, age, type of disease (related to the affected organ), indications for surgery, and type of surgical procedure were also studied. The site of CBFS application during the procedure was reported. From 2006 to 2022, all patients who underwent this procedure were contacted telephonically. All patients with previously significant images and those who underwent computed tomography (CT) scans were included to evaluate the actual situation of the matrix.

Results:
During the study period, a total of 40 patients (33 [82.5%] men and 7 [17.5%] women) aged 32–87 years, with a mean age of 67.8 years, were included. The indications for surgery were hepatocellular carcinoma, 23 (57.5%); hydatid cyst, 3 (7.5%); hepatic adenoma, 1 (2.5%); hepatic trauma, 2 (5.0%); cholecystitis, 2 (5.0%); splenic rupture or bleeding for trauma, 3 (7.5%); neuroendocrine tumour, 1 (2.5%); trauma of the pancreas, 1 (2.5%); peptic gastric ulcer, 3 (7.5%); and colon cancer, 1 (2.5%). Surgery was performed in 6 (15.0%) cases using the laparoscopic approach and in the remaining 34 (85.0%) cases by laparotomy. After 11 years of follow-up, CBFS was observed in four patients on CT.

Conclusion:
Our results showed that CBFS can be permanent years after the procedure. We cannot affirm any secondary effect, but we can affirm that CBFS sponges are not resorbed in 12 weeks and can remain many years after implantation.