

Session n°4 : session Belge en collaboration avec BSAWS

Concepts innovants : innovative concepts

Président : Philippe Hauters (Tournai)

**Modérateurs / Chairmen : Marc Miserez (Leuven), Jean-Luc Bouillot (Paris),
Alain Valverde (Paris)**

Traitement laparoscopique des éventrations : le « suturing concept »

Orateur : Elie Chelala (Lebanon)

Commentateur : Marc Miserez (Leuven)

Discussion

Prévention des hernies parastomiales

Orateur : Philippe Hauters (Tournai)

Commentateur : Jean-Pierre Cossa (Paris)

Discussion

Prévention des éventrations après laparotomie médiane

Orateur : Filip Muysoms (Gand)

Commentateur : Jean-Pierre Palot (Reims)

Discussion

Fixation des prothèses avec de la colle

Orateur : Frederik Berrevoet (Gand)

Commentateur : Tijl Vierendeels (Aalst)

Discussion

J Am Coll Surg. 2015 Apr;220(4):405-13. doi: 10.1016/j.jamcollsurg.2014.12.027. Epub 2015 Jan 2.

Development and validation of a risk stratification score for ventral incisional hernia after abdominal surgery: hernia expectation rates in intra-abdominal surgery (the HERNIA Project).

Goodenough CJ¹, Ko TC¹, Kao LS¹, Nguyen MT¹, Holihan JL¹, Alawadi Z¹, Nguyen DH¹, Flores JR¹, Arita NT², Roth JS³, Liang MK⁴.

Br J Surg. 2014 Oct;101(11):1439-47. doi: 10.1002/bjs.9600. Epub 2014 Aug 14.

Incidence of and risk factors for incisional hernia after abdominal surgery.

Itatsu K¹, Yokoyama Y, Sugawara G, Kubota H, Tojima Y, Kurumiya Y, Kono H, Yamamoto H, Ando M, Nagino M.

2 to 20 % OF LAPAROTOMIES

RISK FACTORS :

- MIDLINE INCISION
- PREVIOUS LAPAROTOMY
- AGE
- BMI > 25
- COPD
- AORTIC ANEURYSM
- DENUTRITION
- SURGICAL SITE INFECTION

Incisional ventral hernias: Review of the literature and recommendations regarding the grading and technique of repair

The Ventral Hernia Working Group: Karl Breuing, MD,^a Charles E. Butler, MD, FACS,^b Stephen Ferzoco, MD, FACS,^a Michael Franz, MD,^c Charles S. Hultman, MD, MBA, FACS,^d Joshua F. Kilbridge,^e Michael Rosen, MD,^f Ronald P. Silverman, MD, FACS,^g and Daniel Vargo, MD, FACS,^h Boston, MA, Houston, TX, Ann Arbor, MI, Chapel Hill, NC, San Francisco, CA, Cleveland, OH, Baltimore, MD, and Salt Lake City, UT

Surgery 2010

Table IV. Comorbidities shown to increase the risk for postoperative infection^{12-14,32}

- Smoking
- Diabetes
- COPD
- CAD
- Nutritional status
- Immunosuppression
- Chronic corticosteroid use
- Low serum albumin
- Obesity
- Advanced age

The Ventral Hernia Working Group

Grade 1

Low Risk

- Low risk of complications
- No history of wound infection

Grade 2

Co-Morbid

- Smoker
- Obese
- Diabetic
- Immunosuppressed
- COPD

Grade 3

Potentially Contaminated

- Previous wound infection
- Stoma present
- Violation of the gastrointestinal tract

Grade 4

Infected

- Infected mesh
- Septic dehiscence

**septic risk with
synthetic mesh**

Avoid synthetic mesh

Meta-Analysis of Primary Mesh Augmentation as Prophylactic Measure to Prevent Incisional Hernia

Timmermans L.^a · de Goede B.^a · Eker H.H.^{a, d} · van Kempen B.J.H.^b · Jeekel J.^c · Lange J.F.^a

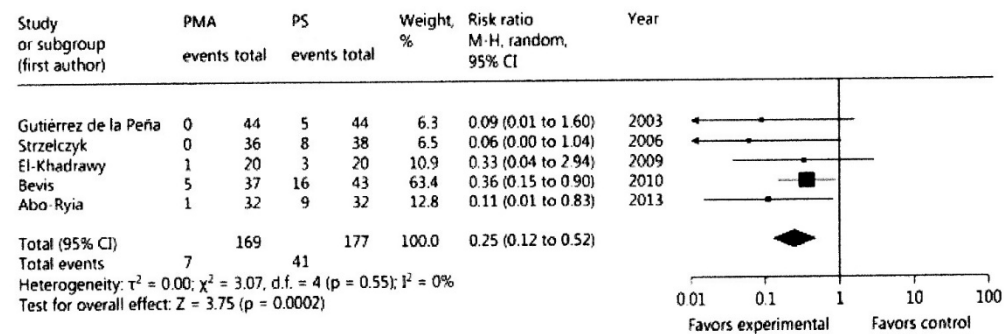


Fig. 3. Incisional hernia.

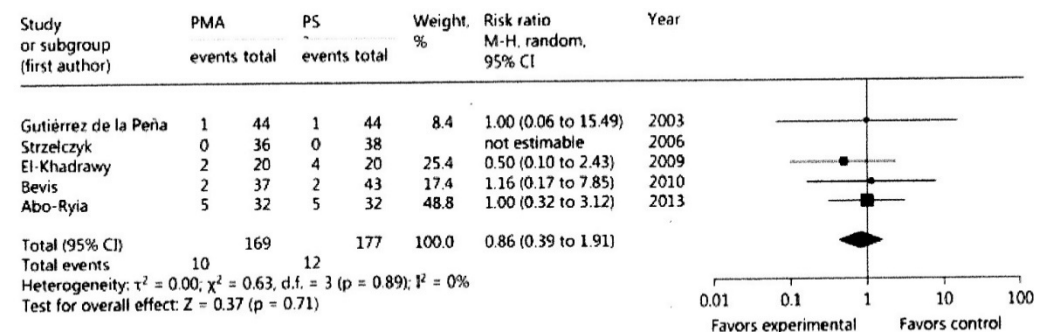


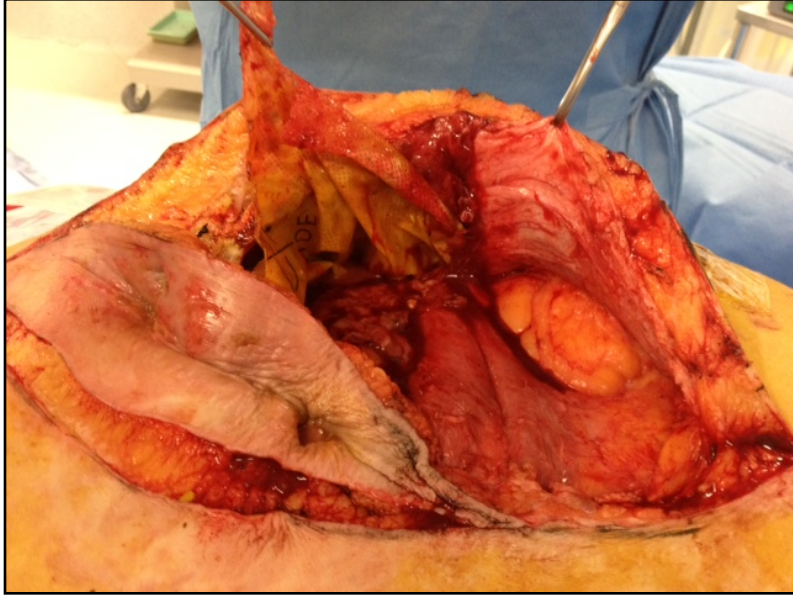
Fig. 4. Infection.

Ann Surg. 2015 Feb;261(2):276-81. doi: 10.1097/SLA.0000000000000798.

Short-term results of a randomized controlled trial comparing primary suture with primary glued mesh augmentation to prevent incisional hernia.

Timmermans L¹, Eker HH, Steyerberg EW, Jairam A, de Jong D, Pierik EG, Lases SS, van der Ham AC, Dawson I, Charbon J, Schuhmacher C, Izbicki JR, Neuhaus P, Knebel P, Fortelny R, Kleinrensink GJ, Jeekel J, Lange JF.

CONCLUSIONS: On the basis of these short-term results, primary mesh augmentation can be considered a safe procedure with only an increase in seroma formation after OMA, but without an increased risk of surgical site infection.



**A MESH INFECTION IS MUCH MORE SERIOUS THAN AN
INFECTION WITHOUT MESH.... ..**



STORY OF A CHRONIC SEPSIS AFTER MESH REPAIR

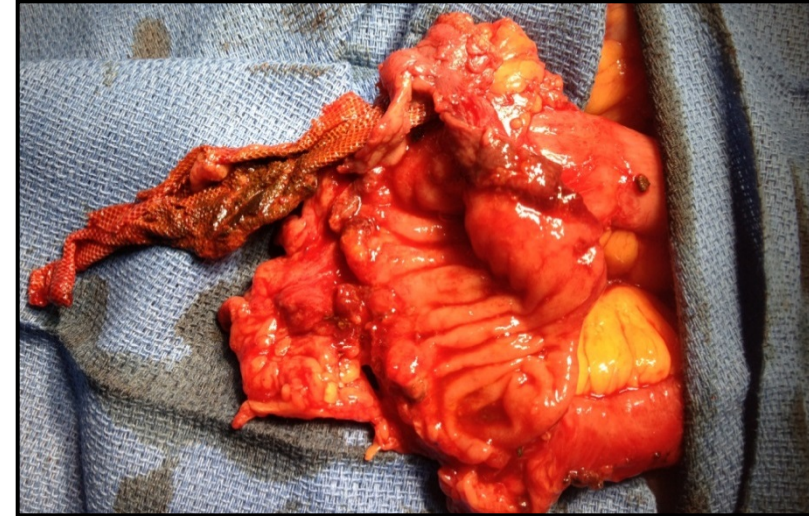
INTERVENTION

Migration of mesh :

- small bowel
- transverse colon
- stomach
- left lobe of the liver

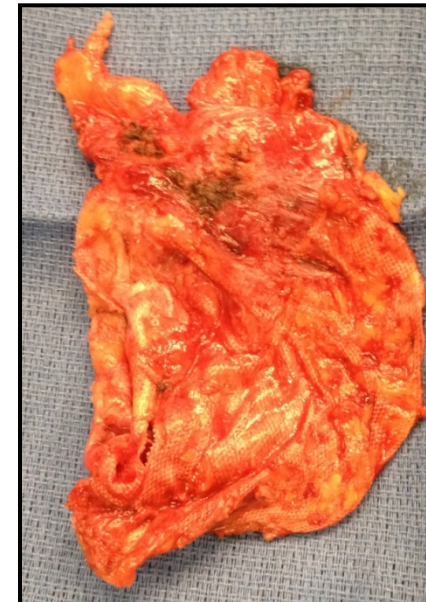
Small bowel resection

Colonic resection



OUTCOME :

- ACFA
- Multiples fistulas : stomy
- septicemia
- pneumopathy
- DCD



Meta-Analysis of Primary Mesh Augmentation as Prophylactic Measure to Prevent Incisional Hernia

Timmermans L.^a · de Goede B.^a · Eker H.H.^{a, d} · van Kempen B.J.H.^b · Jeekel J.^c · Lange J.F.^a

Conclusion

Despite continuous research regarding abdominal wall closure, the incidence of IH remains unacceptably high, especially in patients who have one or more risk factors for the development of IH. However, in an attempt to reduce this incidence, new surgical techniques were developed to reduce the incidence of IH to an acceptable proportion. This study shows that the use of PMA for abdominal wall closure is associated with significantly lower incidence of IH compared to PS. No significant differences could be observed in postoperative complications, such as infections and seroma. Thus, PMA seems to be an effective and safe method for the prevention of IH in high-risk groups. However, the quality of the available RCTs was in some cases low, and important outcome measures, such as mesh removal, hematoma, fistula, postoperative pain, operation duration, hospital stay, enterotomy during relaparotomy, quality of life, and cost-effectiveness were not reported in all studies included. Other large high-quality RCTs should be performed to evaluate these shortcomings.

Hernia. 2013 Aug;17(4):445-55. doi: 10.1007/s10029-013-1119-2. Epub 2013 May 28.

FULL-TEXT ARTICLE

Systematic review and meta-analysis of prophylactic mesh placement for prevention of incisional hernia following midline laparotomy.

Bhangu A¹, Fitzgerald JE, Singh P, Battersby N, Marriott P, Pinkney T.

CONCLUSION: Mesh reinforcement of laparotomy significantly reduced the rate of incisional **hernia** in high-risk patients. However, poor assessment of secondary outcomes limits applicability; routine placement in all patients cannot yet be recommended. More evidence regarding the rates of adverse events, cost-benefits and quality of life are needed.