

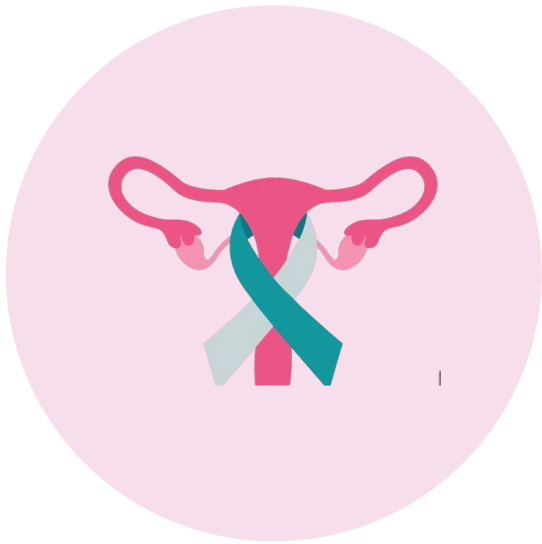
Recommandations actuelles pour la fermeture des laparotomies

Vers une standardisation des pratiques ?

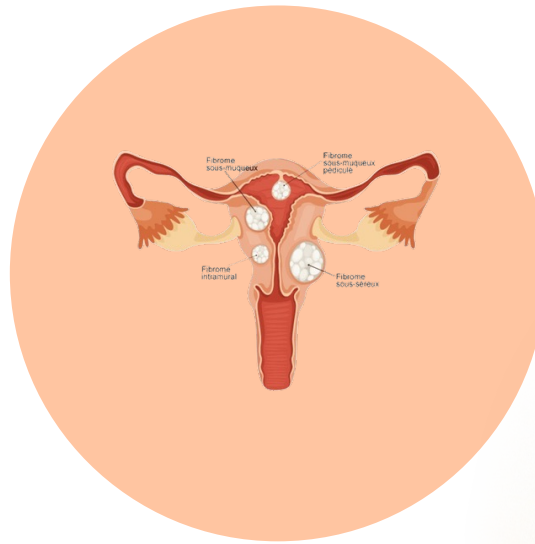


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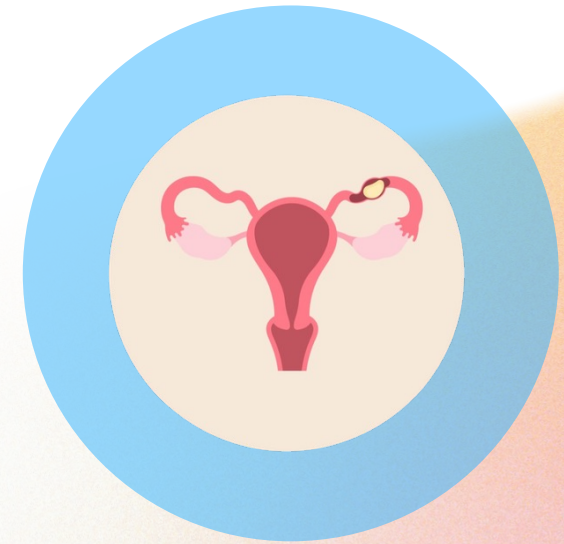
Indications de laparotomie en gynécologie



Chirurgie de cytoréduction
Carcinose péritonéale
Cancer de l'ovaire
Cancers utérins avancés
Chirurgie de stadification complexe



Masses pelviennes volumineuses
Fibromes géants
Masse ovariennes
Endométriose sévère
Chirurgie avec adhérences
majeures



Hémorragie intra-
abdominale
GEU compliquée
Rupture utérine
Hystérectomie d'hémostase

Pourquoi optimiser la fermeture pariétale ?

1 laparotomie sur 5 évoluera vers une éventration

> 20%

Hernie incisionnelle

- de 12 à 38 % selon les séries
- Sous-estimée dans les suivi post opératoire court

30 000
réparations/a
n

Morbidité

- Douleurs chroniques / chirurgie pariétale
- Étranglement / chirurgie en urgence

210–350 M€ /
an

Impact médico-économique

- Coût élevé de la prise en charge
- Prolongation de la durée d'hospitalisation

StatPearls. Incisional Hernia.

Gignoux B, Bayon Y, Martin D, et al. Incidence and risk factors for incisional hernia and recurrence: Retrospective analysis of the French national database. *Colorectal Dis* 2021

Holland AJ, Castleden WM, Norman PE, Stacey MC. Incisional hernias are more common in aneurysmal arterial disease. *Eur J Vasc Endovasc Surg*. 1996;12:196–200.

Yahchouchy-Chouillard E. Incisional hernias. I. Related risk factors.

Rodriguez HE, Matsumura JS, Morasch MD, et al. Timing and incidence of abdominal wall hernias after open AAA repair. *Vasc Endovascular Surg*. 2004;38:237–240.

Bickenbach KA, Karanickolas PJ, Ammori JB, et al. Impact of incision type on outcomes after abdominal surgery. *Am J Surg*. 2013;206:400–409.

Gillion JF, Sanders D, Miserez M, Mulsoms F. Economic burden of incisional ventral hernia repair. *Hernia*. 2016;20:819–830.

HAS (Haute Autorité de Santé). CDD-1265 ... Prise en charge médicale pour le traitement des éventrations de la paroi abdominale. 2007

Évolution des techniques de fermeture pariétale

Surjet continu + Fil monofilament lentement résorbable + petites prises tissulaires

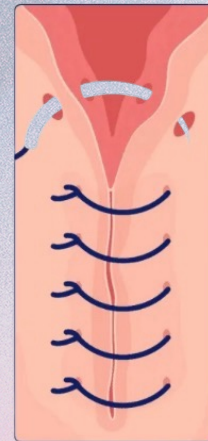
L'aponévrose
retrouve
≈ 50 %
de sa résistance
à 2 mois

Répartition des
contraintes mécaniques

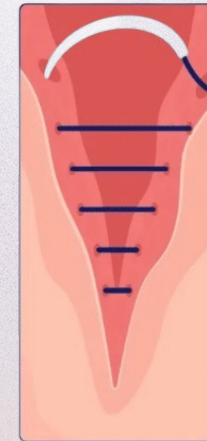
Fermeture continue
↓
risque d'éventration

Non résorbable	Polypropylène (Prolène®)		
	Polyesters (Dacron®)		
	Nylon (Ethilon®)		
Résorbable	Monobrin	Perte de résistance à 3 semaines	Résorption complète
	Polydioxanone (PDS®)	15%	180 jours
	Polyglucosone (Maxon®, Monosyn®)	50%	90 jours
	Polyglécaprone (Monocryl®)	80%	119 jours
	Multibrin tressé		
	Polyglactine (Vicryl®)	50%	70 jours

Fil monofilament
lentement résorbable



points séparés



surjet

van 't Riet M, Steyerberg EW, Nellensteyn J, et al. Meta-analysis of techniques for closure of midline abdominal incisions. Br J Surg. 2002.
Diener MK et al. Elective midline laparotomy closure: the INLINE systematic review and meta-analysis. Cochrane Database Syst Rev. 2010.
Jenkins TP. The burst abdominal wound: a mechanical approach. Br J Surg. 1976.
DesCoteaux JG, Temple WJ, Huchcroft SA, et al. Linea alba closure: determination of ideal distance between sutures. J Invest Surg. 1993.
Millbourn D, Cengiz Y, Israelsson LA. Effect of stitch length on wound complications after closure of midline incisions: a randomized controlled trial. Arch Surg. 2009.
Harlaar JJ, van Ramshorst GH, Nieuwenhuizen J, et al. Small stitches with small suture distances increase laparotomy closure strength. Am J Surg. 2009.

Small bites versus large bites for closure of abdominal midline incisions

STITCHES

a double-blind, multicentre, randomised controlled trial

Population

560 patients

Majeur

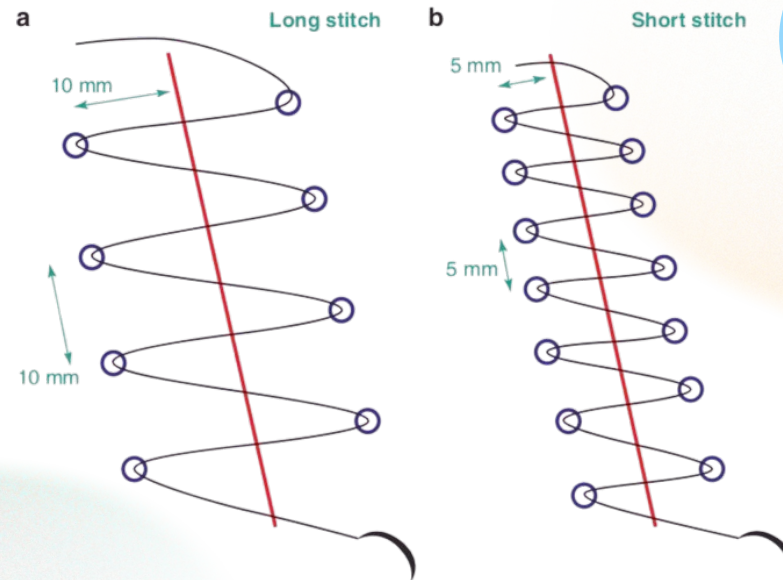
Laparotomie médiane

10 centres néerlandais

fermeture conventionnelle

Large bites
prises : 1 cm
pas : 1 cm

Critère principal
Éventration à 1 an
Examen clinique +
échographie



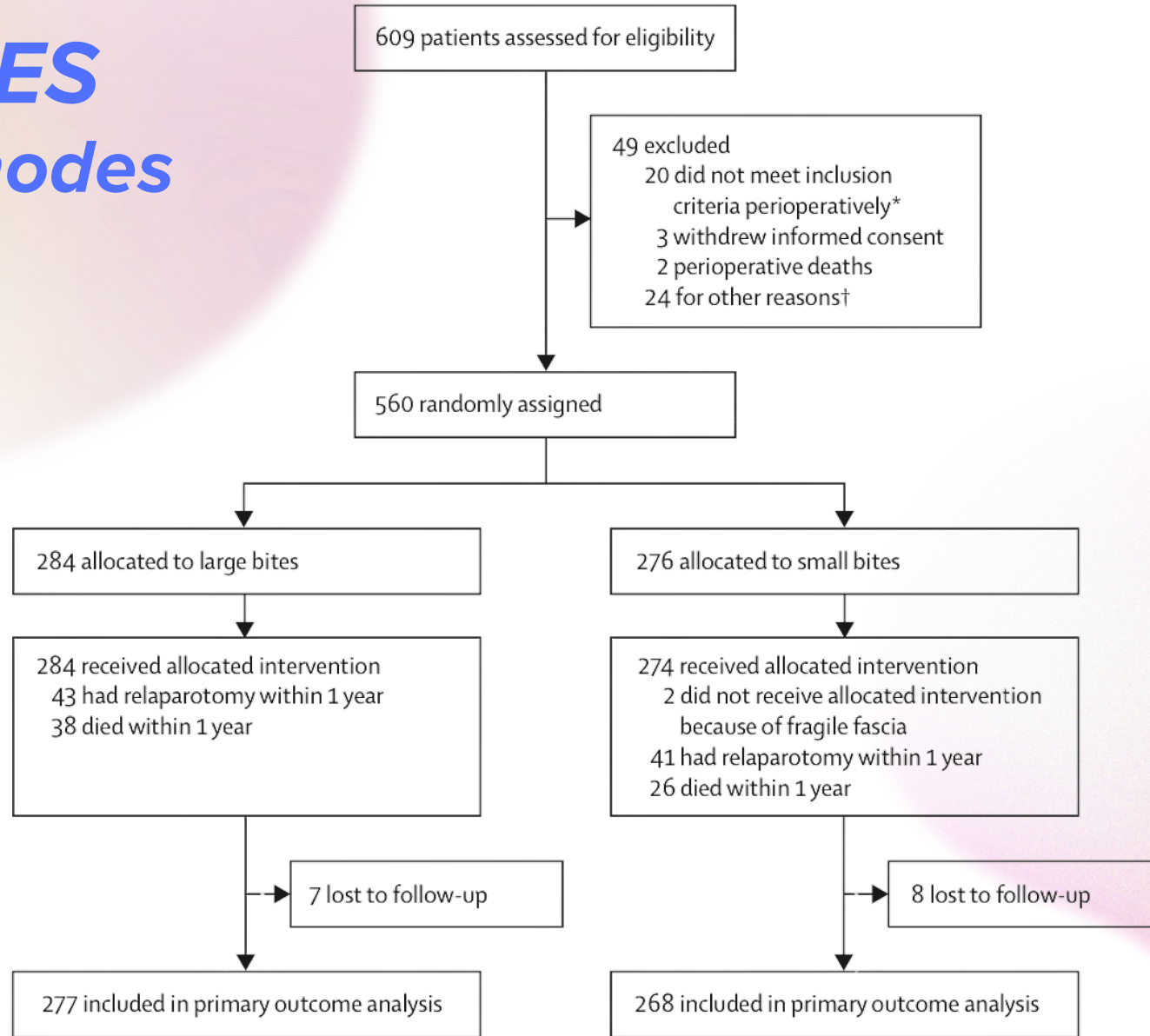
Small bites
prises : 5 mm
pas : 5 mm

Critères secondaires

Infection du site opératoire
Désunion aponévrotique
Durée d'hospitalisation
Qualité de vie

STITCHES

Méthodes



STITCHES

Méthodes

	Large bites group (n=284)	Small bites group (n=276)
Sex		
Male	139 (49%)	137 (50%)
Female	145 (51%)	139 (50%)
Age (years)	63 (54–71)	62 (53–72)
BMI (kg/m ²)*	24 (22–27)	24 (22–27)
Smoking	65 (23%)	77 (28%)
Diabetes mellitus	39 (14%)	29 (11%)
COPD	27 (10%)	44 (16%)
Cardiovascular disease	116 (41%)	101 (37%)
Corticosteroid use	18 (6%)	28 (10%)
Non-incisional hernias†	34 (12%)	37 (13%)
Aneurysm abdominal aorta	12 (4%)	13 (5%)
Previous laparotomy	43 (15%)	49 (18%)

ASA classification		
1	58 (20%)	61 (22%)
2	183 (64%)	162 (59%)
≥3	43 (15%)	53 (19%)
Preoperative chemotherapy	75 (26%)	62 (22%)
Preoperative radiotherapy	55 (19%)	59 (21%)
Type of surgery		
Gynaecological	41 (14%)	41 (15%)
Upper gastrointestinal	89 (31%)	74 (27%)
Lower gastrointestinal	133 (47%)	140 (51%)
Vascular	21 (7%)	21 (8%)

Data are n (%) or median (IQR), unless otherwise stated. BMI=body-mass index. COPD=chronic obstructive pulmonary disease. ASA=American Society of Anesthesiologists. *Data for BMI were missing for 12 patients. †Eg, inguinal, umbilical, and epigastric hernias in history.

STITCHES Résultats

Taux d'éventration

“small bites “ groupe : 13%
Vs

“large bites” groupe : 21%

p= 0.0220

	Large bites group (n=284)	Small bites group (n=276)	p value
Number of stitches	25 (10)	45 (12)	<0.0001
Total length of used sutures (cm)	95 (34)	110 (39)	<0.0001
Wound length (cm)	22 (5)	22 (5)	0.982
Ratio of suture length to wound length	4.3 (1.4)	5.0 (1.5)	<0.0001
Time of fascial closure (min)	10 (4)	14 (6)	<0.0001

Data are mean (SD), unless otherwise stated.

Table 2: Details of suture techniques

BDereenberg EB et al. Small bites versus large bites for closure of abdominal midline incisions (STITCH trial). Lancet. 2015

STITCHES

	Large bites group (n=284)	Small bites group (n=276)	p value
Patients with postoperative complications	129 (45%)	125 (45%)	1.000
Ileus	33 (12%)	28 (10%)	0.590
Pneumonia	40 (14%)	35 (13%)	0.710
Cardiac event	30 (11%)	25 (9%)	0.573
Surgical site infection*	68 (24%)	58 (21%)	0.419
Superficial incisional	33 (12%)	23 (8%)	0.207
Deep incisional	12 (4%)	8 (3%)	0.496
Organ or space	23 (8%)	27 (10%)	0.554
Burst abdomen	2 (1%)	4 (1%)	0.444
Length of hospital stay (days)	14 (24)	15 (35)	0.585

Data are n (%) or mean (SD), unless otherwise stated. *The protocol provides detailed criteria for surgical site infections.

Table 3: Secondary outcomes

STITCHES

Discussion



Essai multicentrique randomisé

97 % de suivi

Évaluation clinique + TDM

Population représentative



Suivi limité à 1 an :

SLTFU-STITCH trial

Chirurgie programmée uniquement :

Small Versus Large Bite Closure of Emergency Midline
Laparotomy



Réduction du risque d'éventration

Pas d'augmentation des
complications

Technique simple et reproductible

Technique de référence

Application en gynécologie : 14% de chirurgie gynécologique

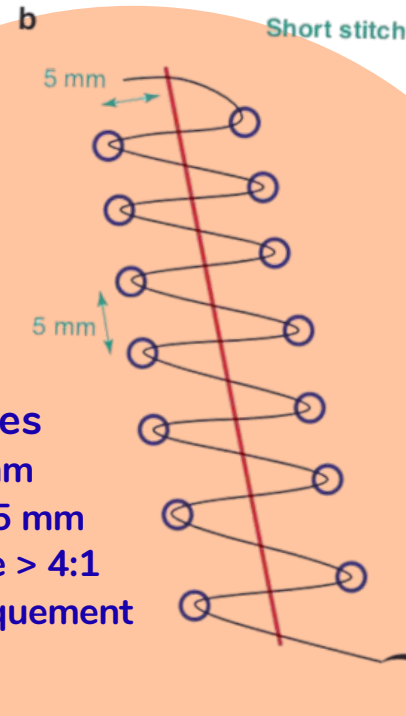
BDeerenberg EB et al. Small bites versus large bites for closure of abdominal midline incisions (STITCH trial). Lancet. 2015.

Tolstrup MB et al. Reduced rate of dehiscence after implementation of a standardized fascial closure technique in patients undergoing emergency laparotomy. Ann Surg. 2017..

Recommandations actuelles pour la fermeture des laparotomies

Fil
monofilament
lentement résorbable
PDS

Small bites
prises 5 mm
espacement 5 mm
ratio fil/plaque > 4:1
aponévrose uniquement



Surjet
continu

BDereenberg EB et al. Small bites versus large bites for closure of abdominal midline incisions (STITCH trial). *Lancet*. 2015

Deerenberg EB et al. STITCH trial. *Lancet*. 2015.

Deerenberg EB et al. Updated guideline for closure of abdominal wall incisions from the European and American Hernia Societies. *Br J Surg*. 2022.

Bickenbach KA et al. Incisional hernia rates after midline versus transverse abdominal incisions: systematic review and meta-analysis. *Surgery*. 2013.

Jairam AP et al. PRIMA trial. *Lancet*. 2017.

Tansawet A et al. Mesh position for hernia prophylaxis after midline laparotomy: systematic review and network meta-analysis. *Int J Surg*. 2020

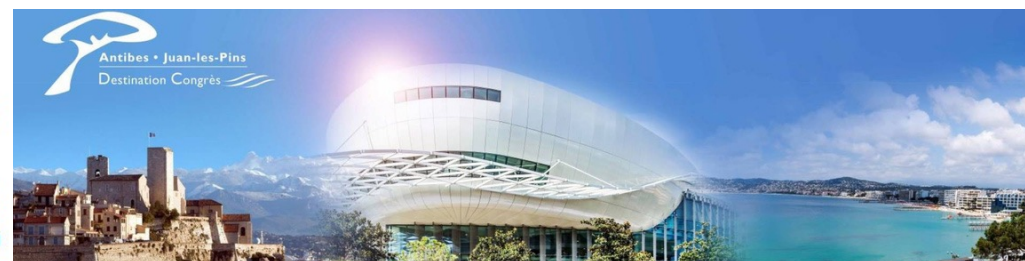
Bloemen A. et al. Long-term outcomes of the STITCH trial: small bites versus large bites for closure of midline laparotomy incisions. *JAMA Surgery*.



24^{ème} CONGRÈS INTERNATIONAL
DE GYNÉCOLOGIE OBSTÉTRIQUE
& REPRODUCTION DE LA CÔTE D'AZUR

Du jeudi 11 au vendredi 12 Juin 2026
Palais des Congrès d'Antibes Juan-les-Pins, France


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Merci de votre attention



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