CHIRURGIE DU PROLAPSUS VOIES BASSES : AUTOLOGUES ET PROTHESES

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Centre Hospitalier Régional
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Disclosures

- Consultant, Honorarium
  - Boston scientific, Fresenius, Allergan
  - Teaching sessions : Boston scientific
- 5 Patents in process in mesh kits, synthetic mesh design and modelization of pelvic cavity
- Research project development new physiologic synthetic mesh

Technique opératoire

- **Très nombreuses techniques**

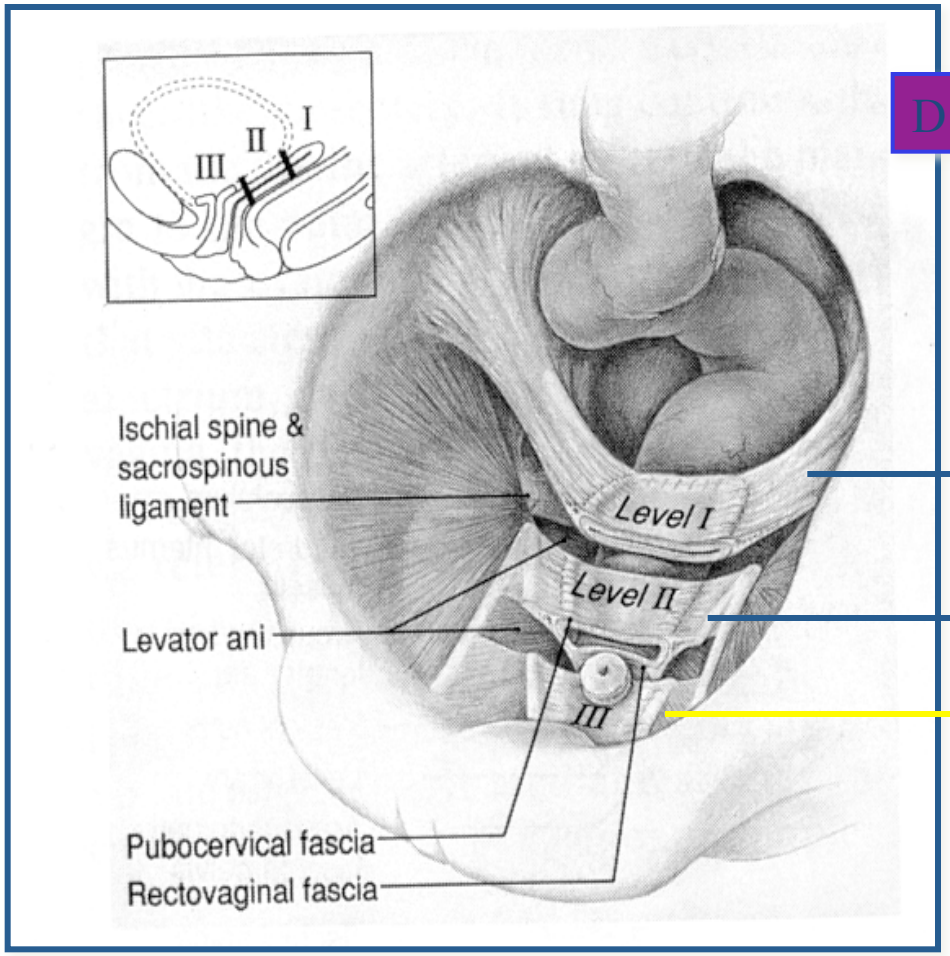
- **Très nombreuses variations techniques : résorbable ou non, lent ou non, nombre de points, étendue résections, réglage de la tension**

- **très peu de validation scientifique**
  - **Richter / pf**
  - **Colporraphies antérieures**

TRAITEMENT

- Traitement de l’apex
- Traitement cystocèles
- Traitement de la rectocèle isolée
- Cloisonnement vaginal

Anatomie vaginale
les 3 niveaux de DeLancey



D'après J.O.L. DeLancey

Niveau I : apex
LES, US

Niveau II : fascia, ATFP

Niveau III : périnée

Prise en charge des prolapsus Lille

- Femmes moins de 50 ans: PF coelio avec prothèse
- Femmes plus de 60 ans : chirurgie vaginale avec prothèse
- Obésité, cystocèles volumineuses : chirurgie vaginale prothèse:
- 15% réparations autologues 2011

Traitement complet

Voie basse : après 60 ans, obésité, volumineux prolapsus, anesthésie locorégionale

- Geste antérieur : plicature, paletot, Suspension para vaginale, plastron
- Richter +++ ou Suspension Utérosacrés
- Myorraphie des élévateurs, plicature prérectale

association possible :

Hystérectomie totale

Périnéorraphie

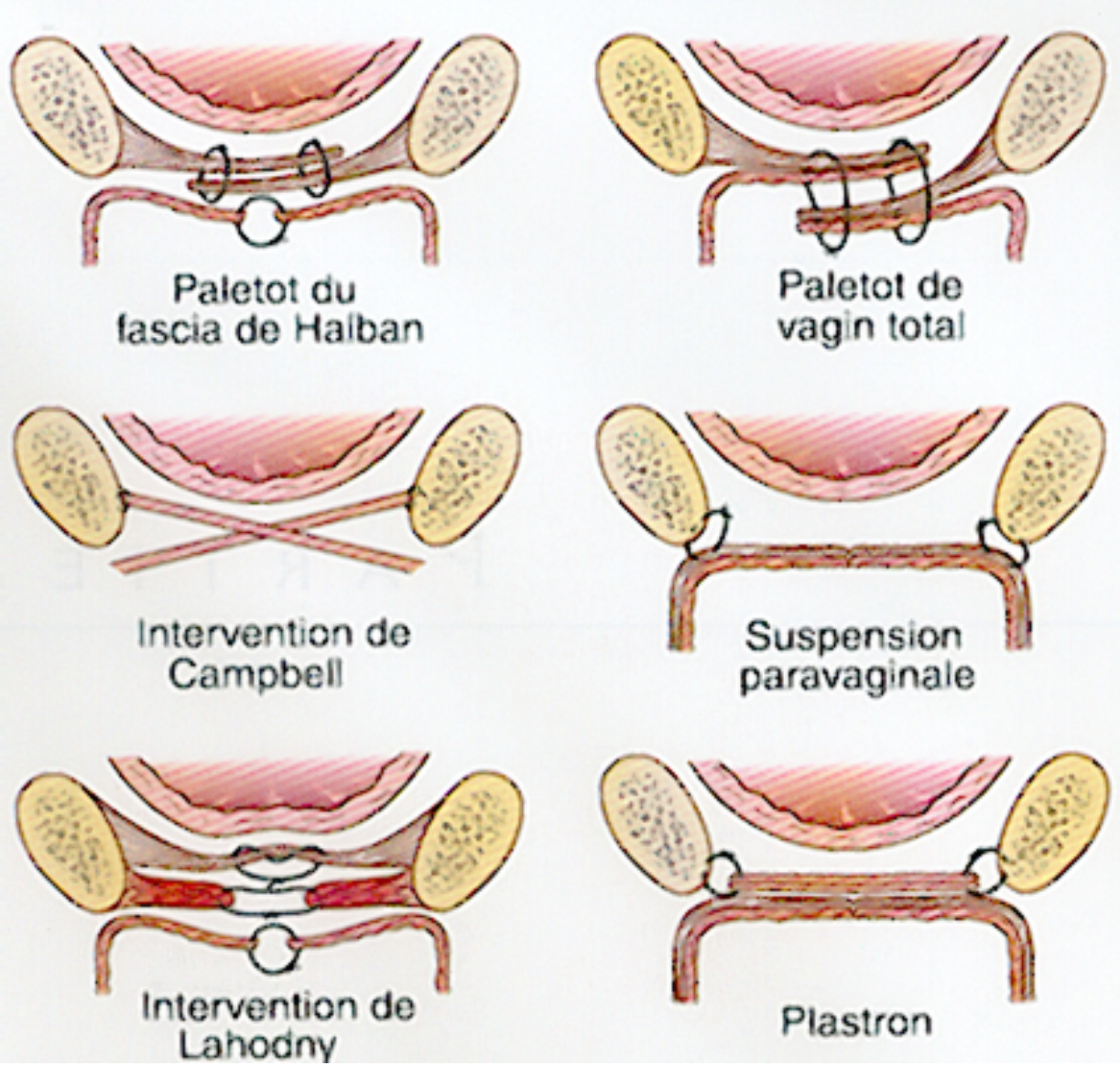
Geste urinaire ??

Résultats:

29 à 58 % de récidive à un an

33 % de ré-intervention…

Différentes cures de cystocèle



Différentes techniques de suspension du fond vaginal

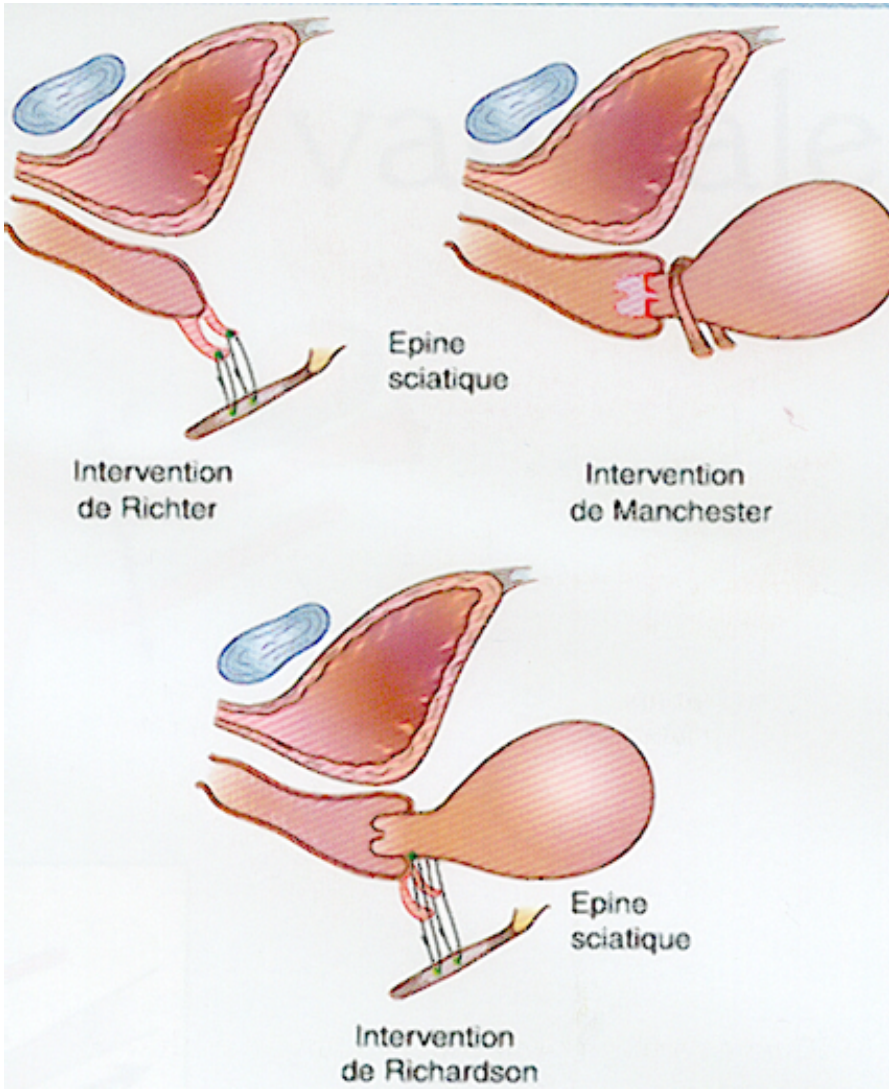
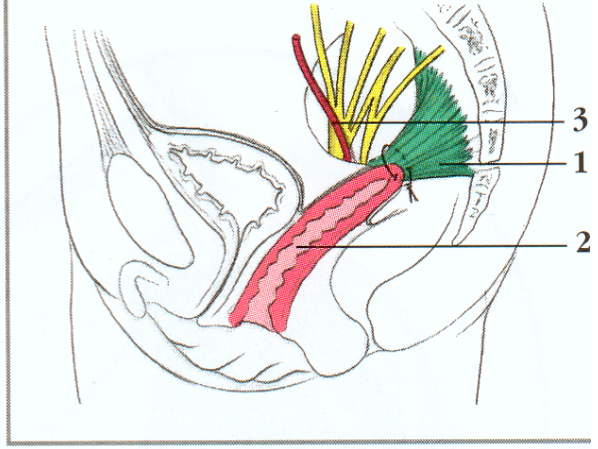
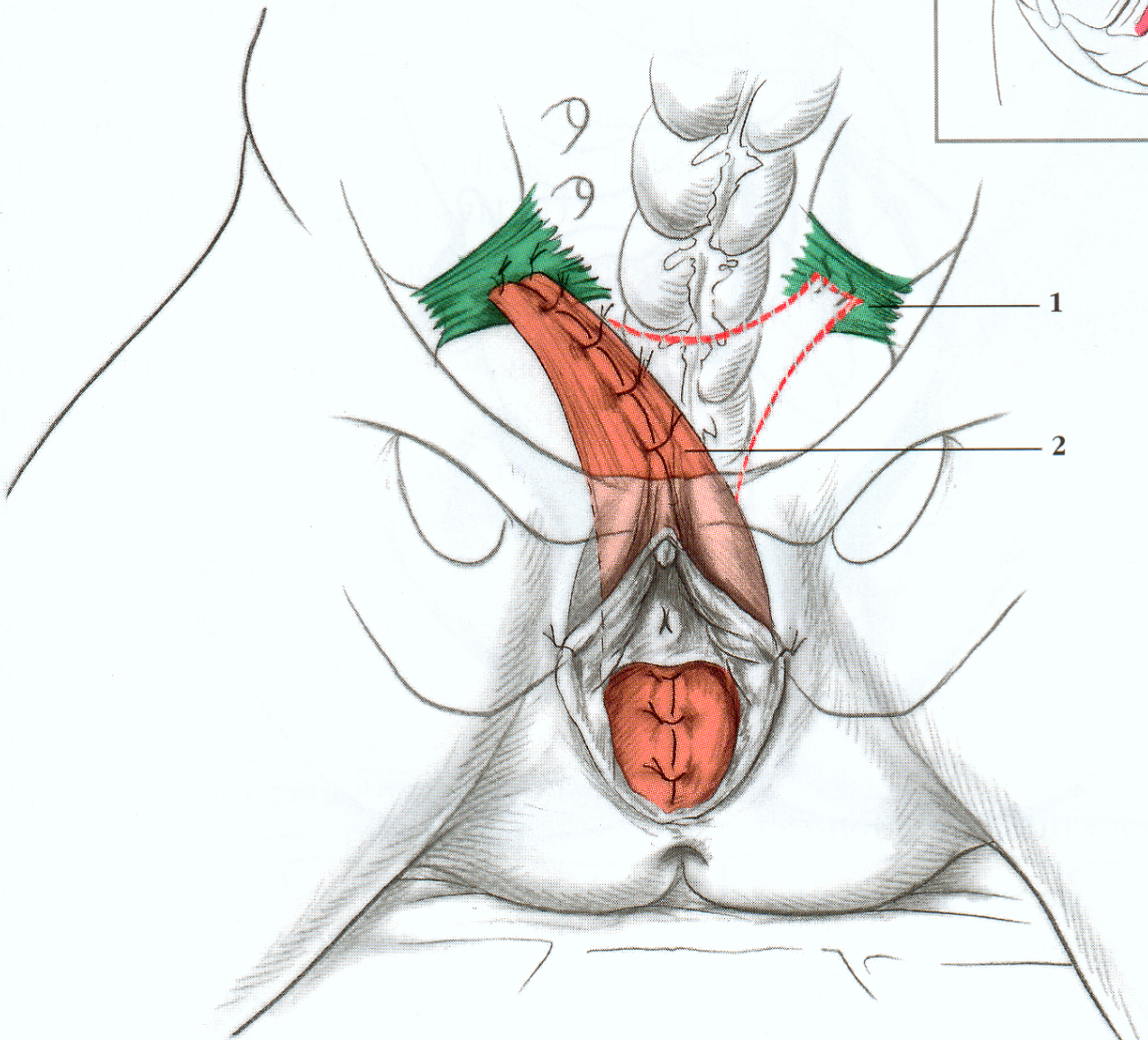


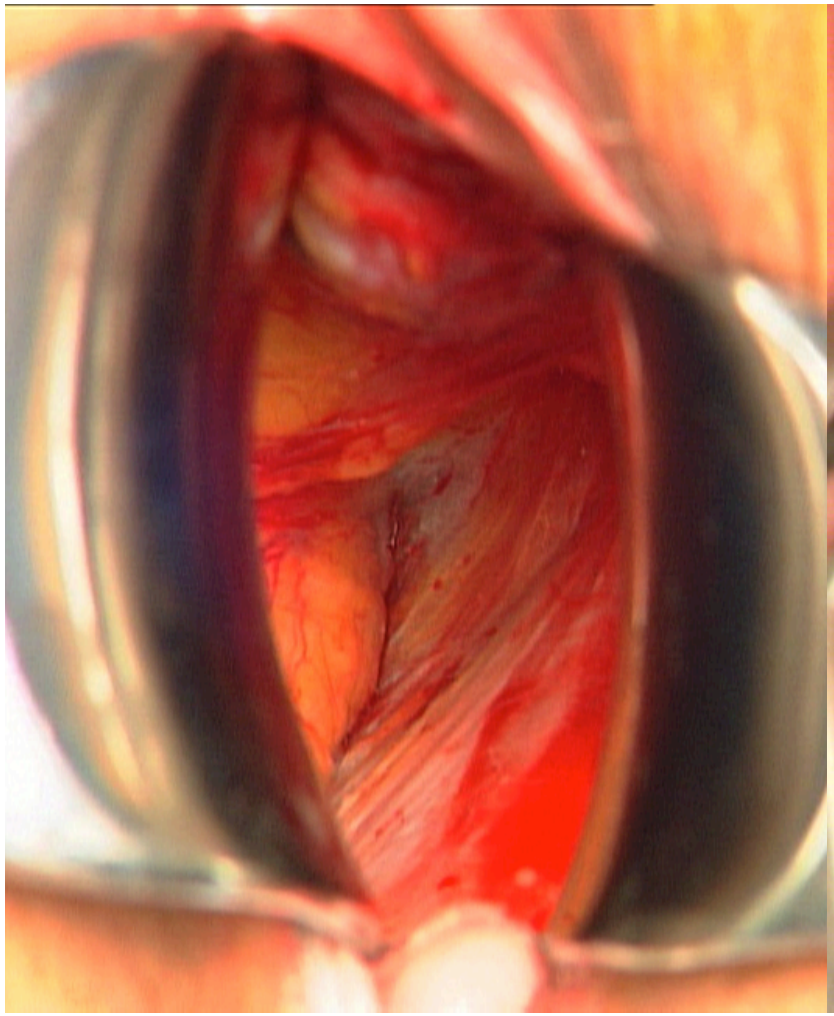
Fig. 11.18. Sacro-spino-fixation vaginale. Principes anatomiques. En cartouche : coupe sagittale.

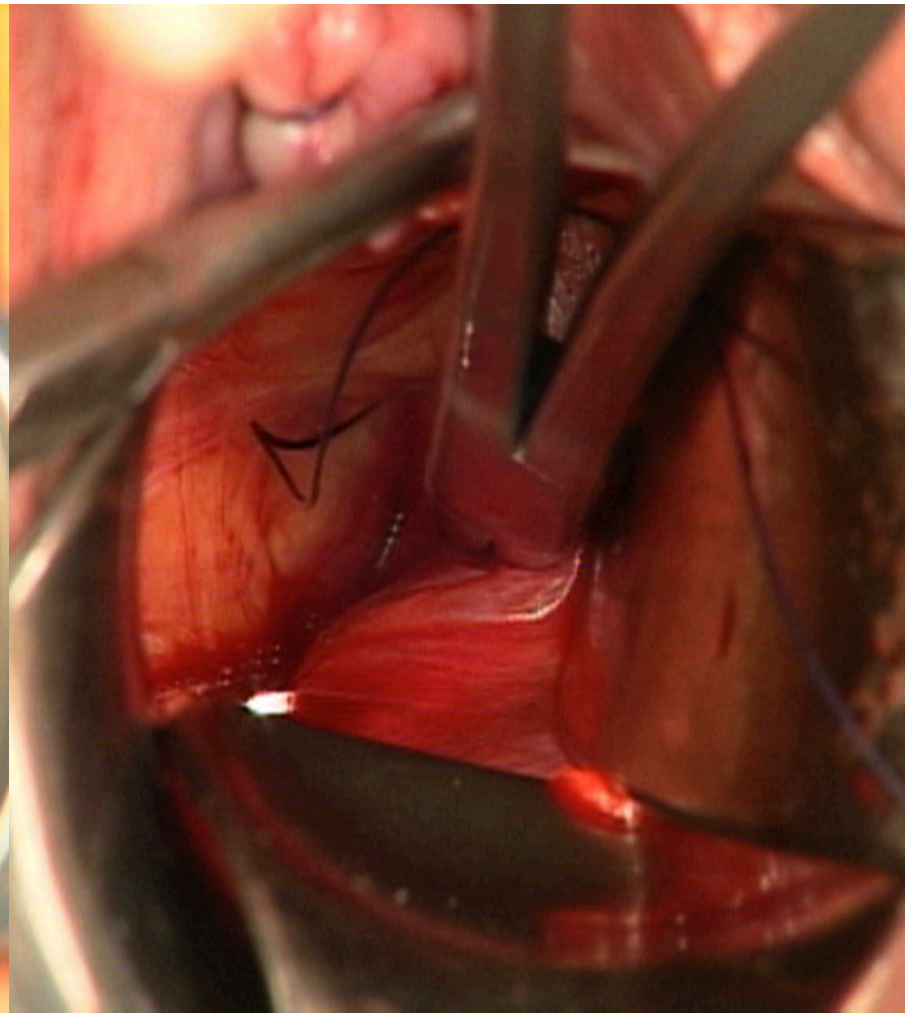
1. lig. sacro-épineux
2. vagin
3. a. pudendale interne et n. pudendal



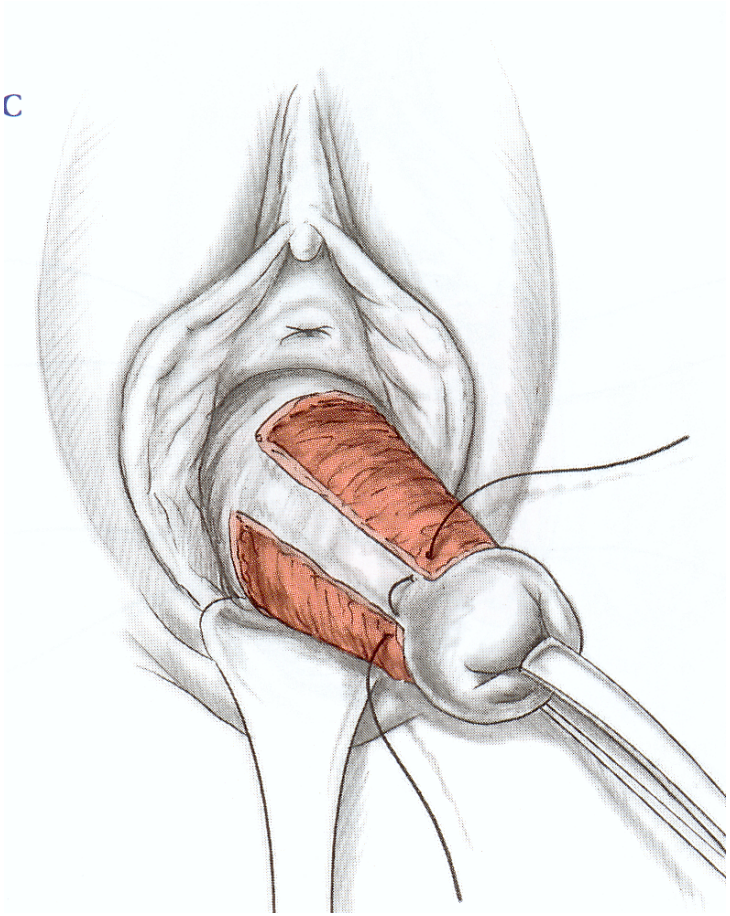


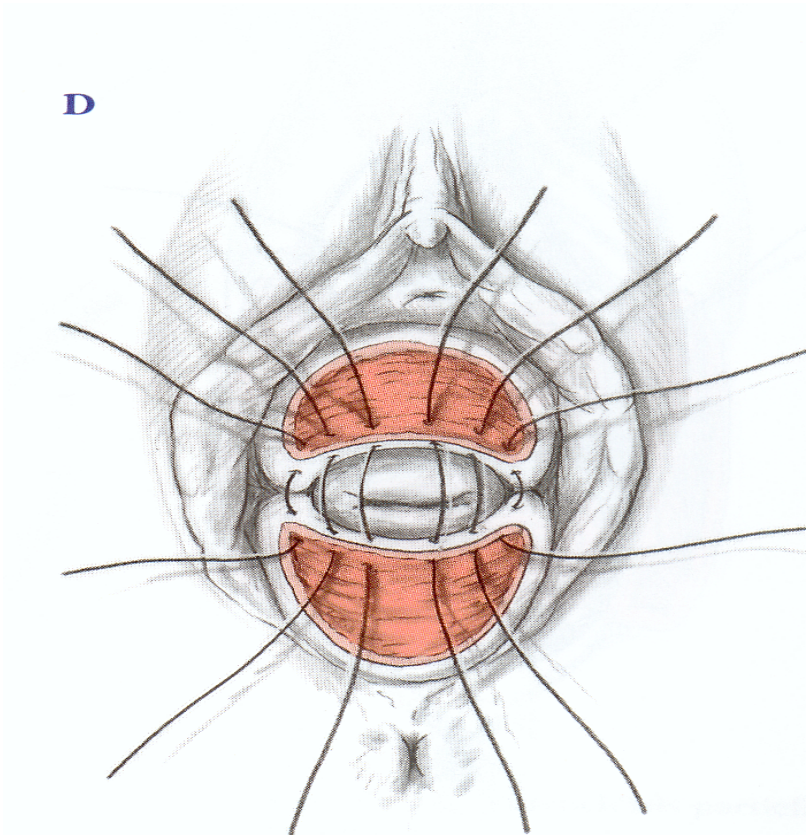
Suspension au ligament sacroépineux selon Richter





Fermeture complète du vagin : Lefort





Possible sous anesthésie locale

VOIE VAGINALE
SUSPENSION APICALE

- SACROSPINOFIXATIONS
  - ANTÉRIEURE : axe plus favorable, palpatoire, aide à la préhension Capio
  - POSTERIEURE : plus de cystocele, dissection plus facile moins dangereuse

- SUSPENSION DES LIGAMENTS UTEROSACRES

SACROSPINOFIXATION POSTERIEURE

CHIRURGIE DE LA RECTOCELE

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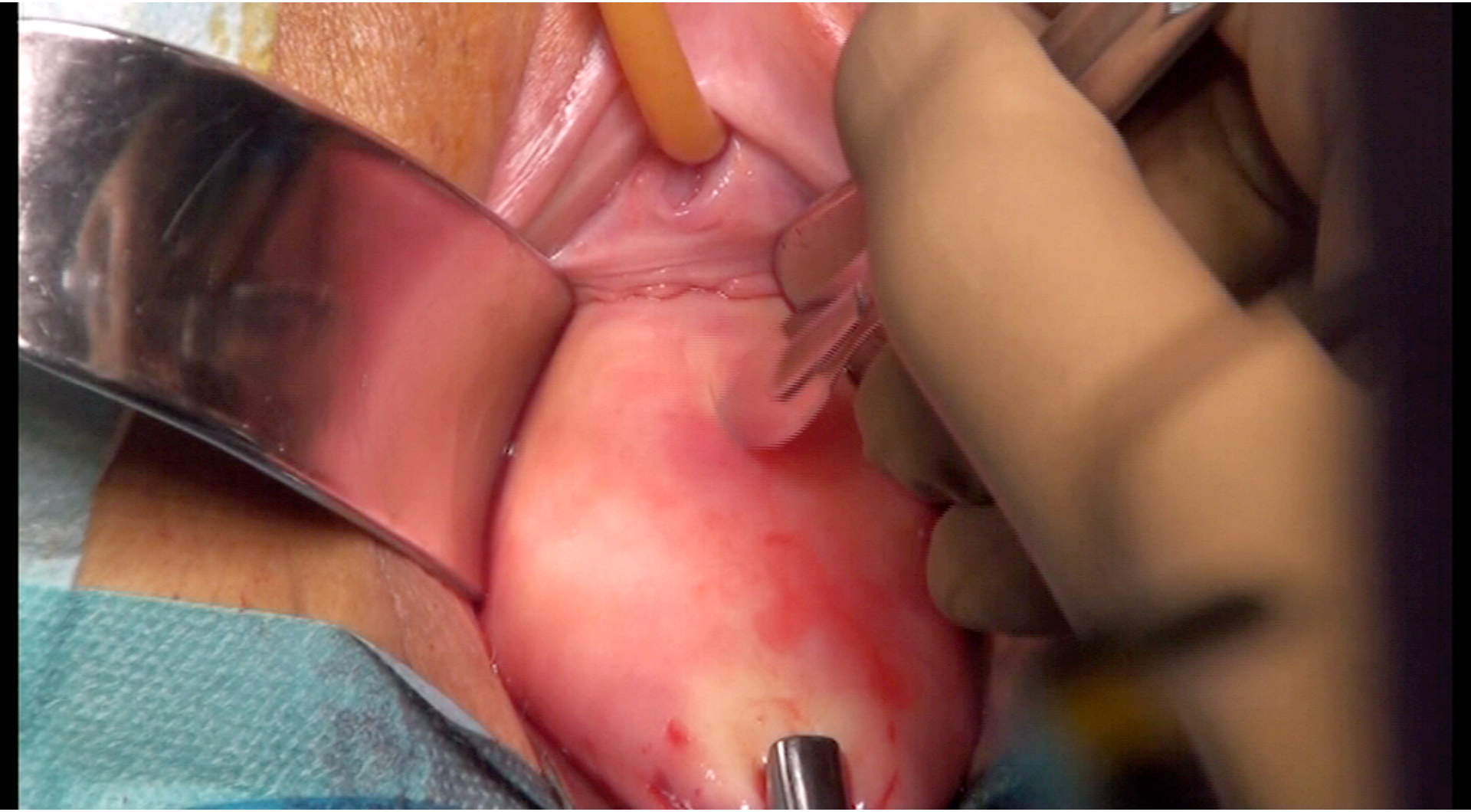
SACROSPINOFIXATION ANTERIEURE

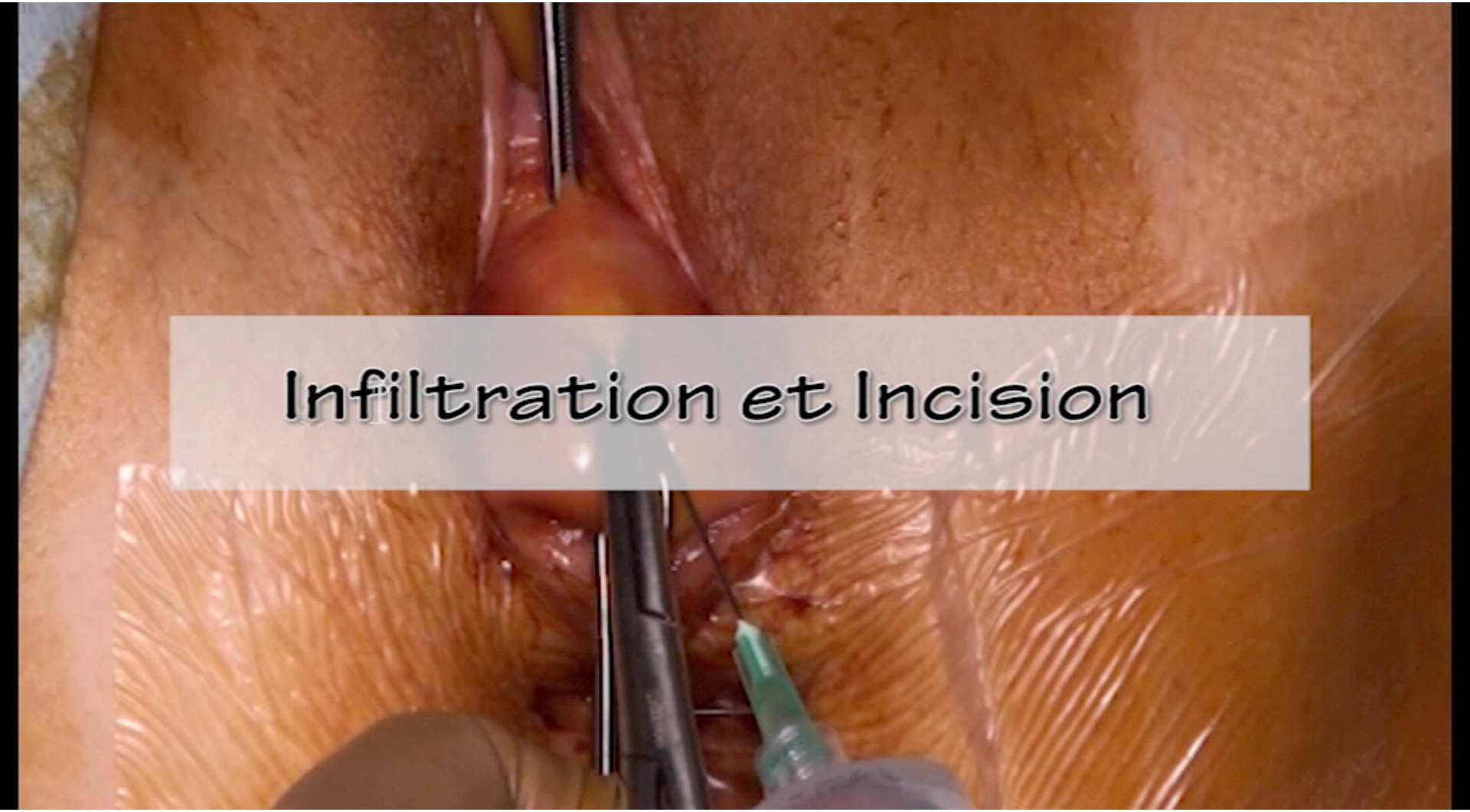
SUSPENSION AUX US : MANCHESTER



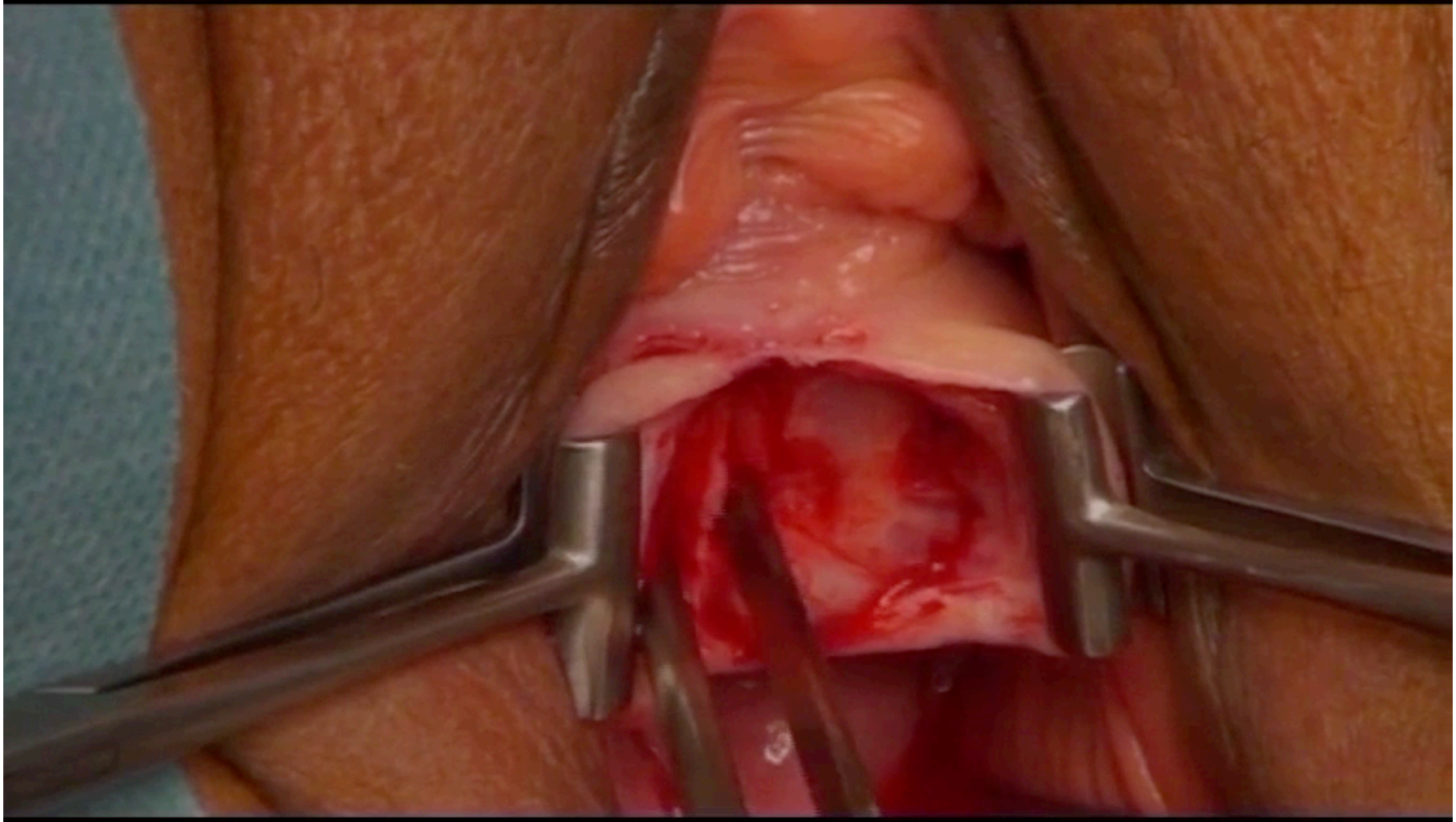
TRAITEMENT DE LA CYSTOCELE

PALETOT, COLPORRAPHIES

DISSECTION INITIALE COMMUNE



PALETOT FASCIA SOUS VESICAL



TRAITEMENT DE LA RECTOCELE

PLICATURE PRERECTALE

VOIE VAGINALE: TISSUS AUTOLOGUES

- Plicature pré rectale
- Site specific repair
- Colpectomie associée
- Dyspareunies ? (myorraphie proscrite)
- Récidives (mal évaluées) ?

DISSECTION INITIALE COMMUNE

CHIRURGIE DE LA RECTOCELE PAR VOIE VAGINALE

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PLICATURE PRÉ RECTALE

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COLPOCLEISIS SELON LEFORT

Colpocléisis
selon Lefort

P Debodinance
CHG Dunkerque
France

CONCLUSIONS

- Techniques non standardisées
- Techniques non validées
- Efficacité au long cours discutée
- Information pré opératoire +++

PROTHÈSES VOIE VAGINALE

Still a very hot topic… for slings mainly…and for vaginal meshes!!

- Many products disappeared from the market Prolift, Elevate
- FDA 2011
- No more research and developments on meshes
- European report SCENHIR européen / meshes for incontinence and prolapse
- Trials in the US +++ : class actions / quality of PP / Safety of products / attorneys against compagnies

Apical prolapse

- Review M Barber-C Maher 2013 Int Obstet Gynecol J
- ASC better / Sacrospinous susension gr A
  - Less SUI and Dyspareunia, more cost, morbidity, hosp stay
- ASC/LSC/RSC : cheaper grade B
- ASC / LSC : as effective, less blood loss and hosp stay grade C

Outcomes of Sacrocolpopexy

- Hudson C 2014 : Rob SC 13 studies 577 patients
  - Mesh erosion 4.1 % mesh revision 1.7%
  - Recurent prolapse apex 0.8% other 2.5%

- De Gouveia 2016 Lap/Open SC Int OG J : 12 studies 4757 patients
  - Eq point C, PopQ, recurence
  - LSC : less blood loss, hosp stay, 87 mn more

Comparison Sacrocolpopexy

- Siddiquin 2015 Obstet Gynecol Mesh LSC / Vag Native Tissues
  - 13 studies LSC better durability
  - Ileus Bowel occlusions 2.7/0.2%
  - Mesh suture complications 4.2/0.4%
- Nygaard 2015 JAMA
  - Long term FU LSC 7 years FU 10.5% mesh erosions

Sacrocolpopexy for POP evidence review & recommendations

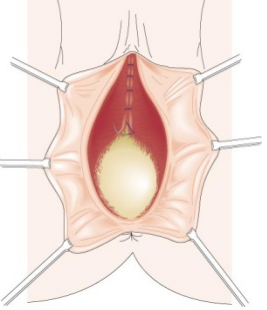
Costantini 2016 Eur J Obstet Gynecol

- Prefered procedure for apical prolapse A
- Monofilament graft of choice B
- Laparoscopic approach preferred B
- Supports concomitant procedures B
- Permanent or delayed sutures / vagina C
- Tackers or sutures / promontory C
- Closing peritoneum C

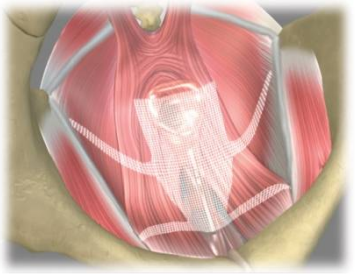
2016 Cochrane review: Surgical management of Pelvic Organ Prolapse

Mesh complications

Maher C, Feiner B, Baessler K,
Schmid C, Glazener C,



TVM Mesh or grafts compared with native tissue repair for vaginal prolapse



Cochrane 2016 : 1-3 years follow up

Advantages meshes

↑ **subjective results RR: 0,66**

↑ **objective results RR: 0,40**

↓ Reintervention for Prolapse

RR : 0,53,

12 RCT n=1675, 38% native/ 11-20% mesh

Disadvantages Mesh

↑ bladder injuries RR 3,92

↑ SUI de novo RR: 1.39 (12 RCT, n=1512)

reinterventions exposition : 8%

↑ total reoperation: RR 2,40

7 RCT, n=867, 5% Native/ 7-18% mesh

Still no difference : Quality of life, dyspareunia, SUI

Random Studies meshes	n	N meshes		Mesh exposition	Mesh expo (%)	FU	ReInt (%)
Altman et al.	389	186	Prolift	6	**3.2**	12	6 (100)
Halaska et al.	168	79	Prolift	16	**20.8**	12	10 (62)
Withagen et al.	190	83	PP	14	**16.9**	12	5 (36)
De Tayrac	147	75	Ugytex	7	**9.5**	12	4 (57)
Lucot et al	257	128	PP	2	**1.5**	12	2 (100)
Sivaslioglu et al.	90	43	PP	3	**6.9**	12	3 (100)
Rudnicki et al	161	78	Avaulta Plus	10	**13.3**	12	5 (50)
Sokol et al.	65	32	Prolift	5	**15.6**	12	3 (60)
Vollebregt et al.	125	58	Avaulta	2	**4**	12	2 (100)

Expected benefits with vaginal surgery and meshes

- Improve long term results ? For laparoscopic sacropexy and vaginal meshes

- Technical simplification ++/ for vaginal traditional surgery (Richter SSF, paraV suspension , levator myorraphy)
  - Reproductibility
  - Shorter learning curve
  - Shorter operative time +++
  - Lower morbidity ++

- Day care surgery

Vaginal mesh implantation

- Improved anatomical results with mesh use
- Less re-interventions for recurrence
- But more re-interventions for
  - Mesh exposition +++
  - SUI (?)

No benefit in the short term

- Benefits after 3-5 y follow up ?

Experience in Lille

- Retrospective monocentric study
- 600 consecutive patients , 524 patients included
  - Death during follow-up (n=8)
  - Unavailable for phone interview (n=68)
- Follow up : 37 months
- 71 % prolift total, 8% HV, 31% urethral slings
- 50 previous surgery : prolapse hysterectomy or stress incontinence

de Landsheere *AmJOG 2011*

Prolift and re-intervention for mesh complications in Lille

Indication re-intervention	n (%)	Median delay (months)
Mesh-related Complication	**n=19 (3.6%)**	**15 months**
- Mesh exposure	n=13 (2.5%)	13
- Mesh infection	n=1 (0.2%)	0.5
- Mesh retraction	n=2 (0.4%)	18
- Rectal compression	n=2 (0.4%)	18
- Vaginal synechia	n=2 (0.4%)	25

de Landsheere *AmJOG 2011*

Reinterventions after sacropexy and vag mesh : Our experience in Lille

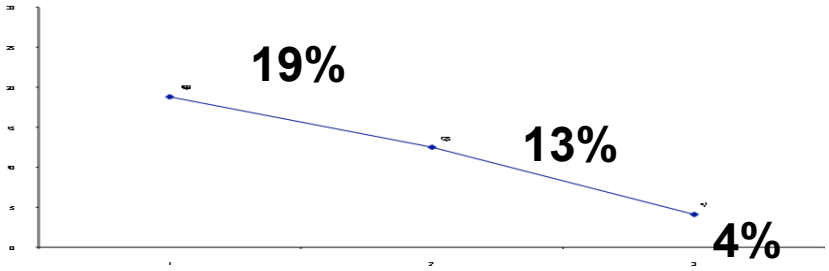
Re int	N FU	rate reInterv	Among Recur prolapse	for Prolapse	For Stress Inc	Compli meshes	
Lap SC	391 53,5 months	49 12,5%	4/52 8%	20 5,1%	18 4,6%	11 2,8%	%
Vag	524 37 months	73 13,7%	10/98 10,2%	16 3%	36 6,9%	19 3,6%	%

Reinterventions after sacropexy and vag mesh : Our experience in Lille

Prolapse Lille	N FU	Prolapse	Stress Inc	Compli meshes
Vaginal mesh	**524** **37 months**	16 **3%**	36 **6,9%**	19 **3,6%**
Laparoscopic sacropexy	**391** **53,5 months**	20 **5,1%**	18 **4,6%**	11 **2,8%**
Late Vaginal mesh	**524** **105 months**	44 **8,39%**	50 **9,54%**	26 **4,9%**

Most important topic with surgery : SURGEON EXPERIENCE

- The learning curve



DWYER et al.
Br J Obstet Gynaecol 2004

- Univariate logistic regression on 198 patients with 14 erosions (7.1%):
  Consultant vs fellow
  Erosion rates: 2.9% vs 15.6%
  OR 0.31 [95% CI 0.09-1.0] p=0.06

AGHTARI, DWYER et al., Int Urogynecol J 2005

Surgical training

Prolift total +M	**Senior** *n=654/774 (84,5%)*	**Junior** *n=120/774 (15,5%)*	
Global reintervention rate	n=62 **9,5%**	n=21 **17,5%**	p=0,0148
Mesh exposition	n=12 **1,8%**	n=6 **5,0%**	p=0,04
Prolapse recurence	n=12 **1,8%**	n=6 **5,0%**	NS
Urinary complications	n=35 **5,3%**	n=12 **10%**	NS

Conclusion

- Clear indications of sacropexy ? Apical prolapse, cystoceles, rectoceles ?
- No clear indications between vaginal or laparoscopic meshes :
  - Lap : sexually active ? Not enough data
  - Vag : local anesthesia, uterine preservation
- Vaginal surgery : needed for older, fragile, obese, previous pelvic surgeries, very large prolapse +++
- Meshes in case of risk of recurence ??

Risk factors of recurence

Recurent cystocele = principal risk factor for recurence (NP2)

Clark et al, Am J Obstet Gynecol, 2003 *Nam et al, Int J Gynaecol Obstet 2010*

Other risk factors (not validated)

Stage cystocèle III or IV, family history of genital prolapse, chronic strain (cough, constipation, dyschesia), hyperlaxity (Ehlers Danlos)

Weemhof et , IUJ, 2012

Obesity : **not** a risk factor for recurence

Weemhof et al, 2012 *Clark et al, 2003* *Nam et al, 2010* *Altman, 2011*

Conclusion

- Vaginal surgery : lack of evaluation of autologous surgeries
- Vaginal surgery with SSF : lack of clear evaluation against sacropexy
- Laparoscopic sacropexy : lack of scientific evaluation, technical validation, long term complication and success
- Vaginal surgery : needed for older, fragile, obese, previous pelvic surgeries, very large prolapse +++