Conférence de cloture: Towards less meshes: a tailored approach?

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Financial Disclosures

no conflict of interest

Ethicon

Bard





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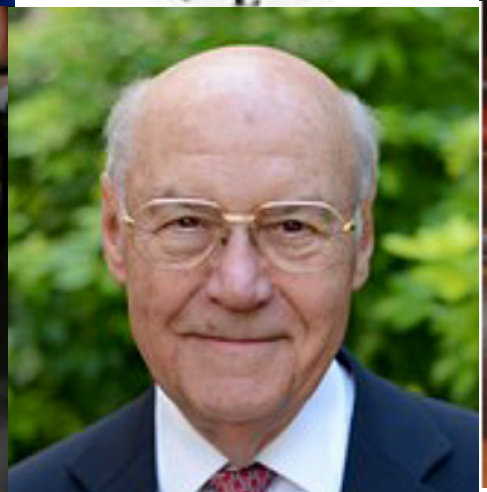
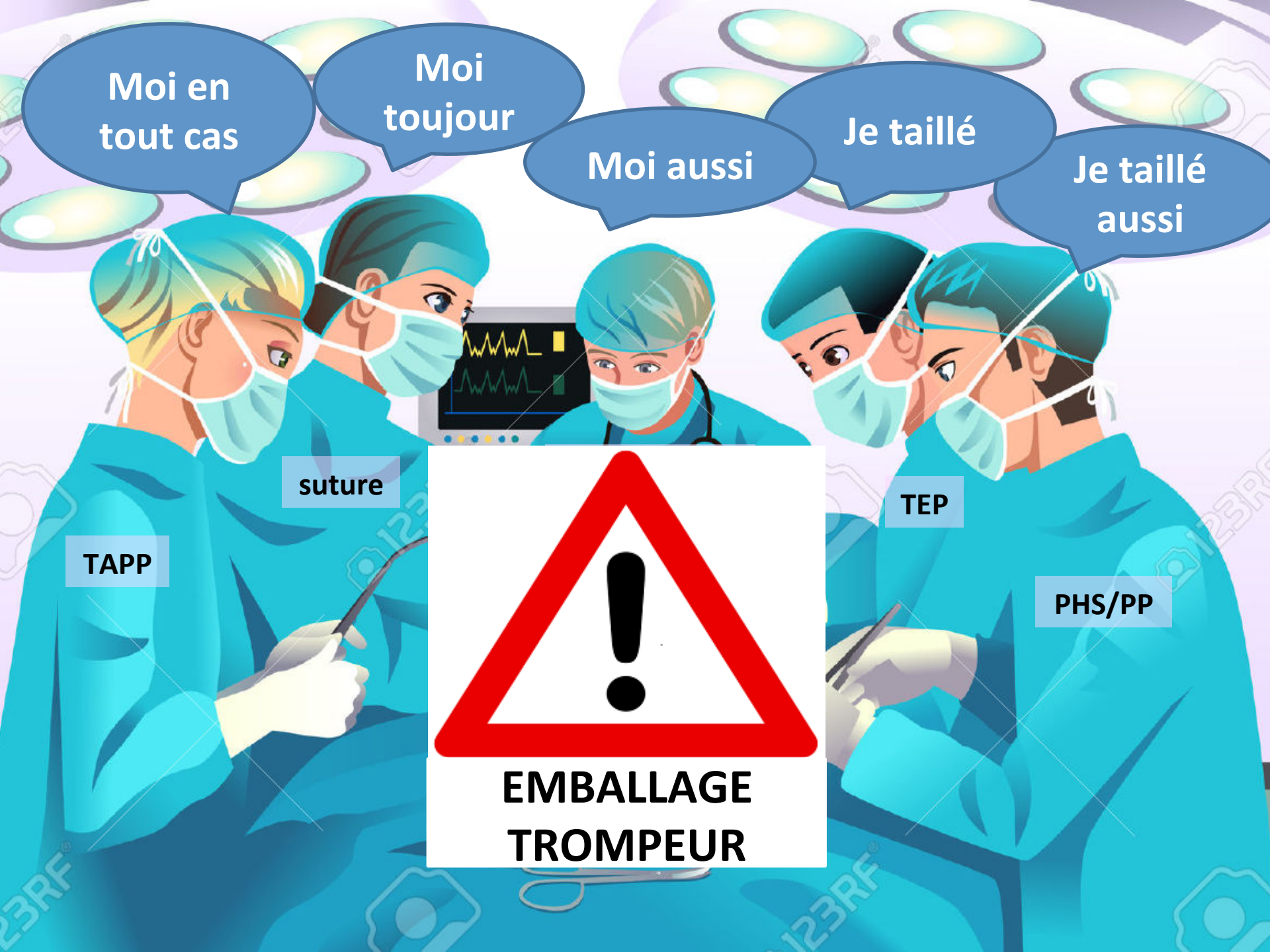
GREPA



Moi en tout cas
Moi toujour
Moi aussi
Je taillé
Je taillé aussi
suture
TAPP
TEP
PHS/PP
EMBALLAGE TROMPEUR

Individualized Medicine:

for tailored prevention, diagnosis and therapy

Personalized Medicine

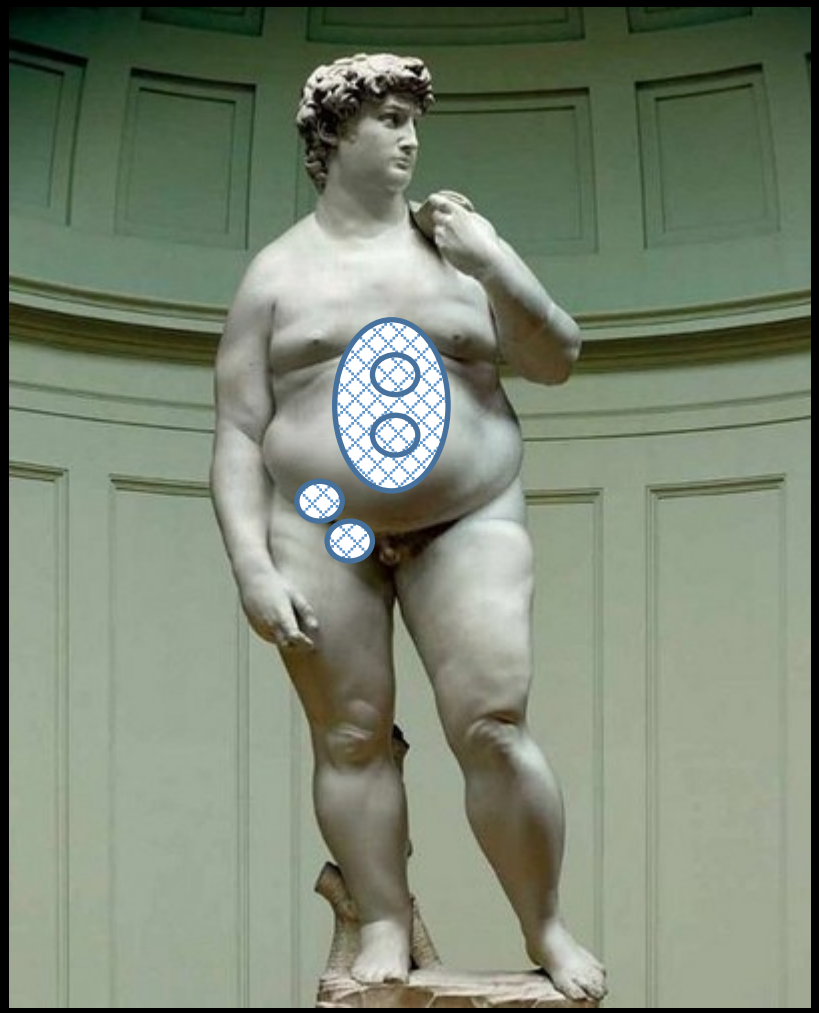
….. is a medical model that separates patients into different groups - with medical decisions, practices, interventions and/or products being tailored to the individual patient based on their predicted response or risk of disease.

……the tailoring of treatment to patients dates back at least to the time of Hippocrates, …. provides a clear evidence base on which to stratify patients.

custom tailoring to fit!

general **agreement**
among herniologists!

Measuring tape



- hernia-size
- classification
- risk profil
- herniosis
- surgeons-preference
- mesh material
- economy
- patients preference

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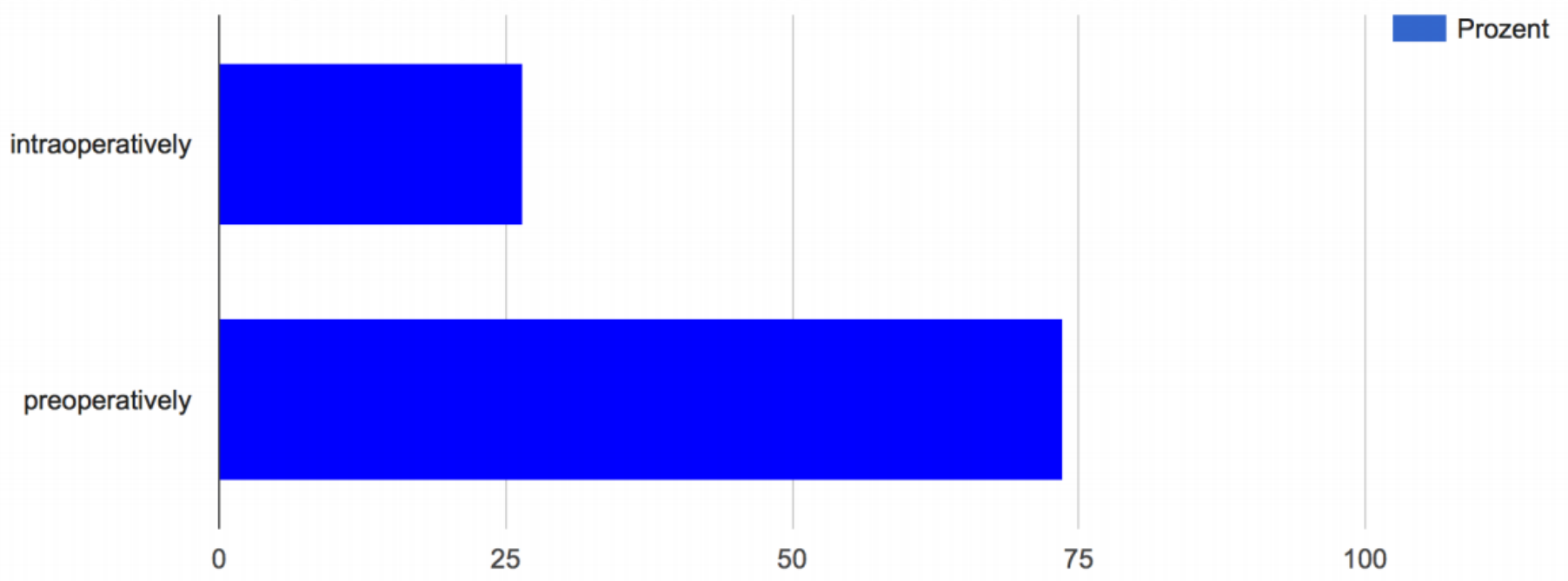
When do you tailore your procedure to the patient?

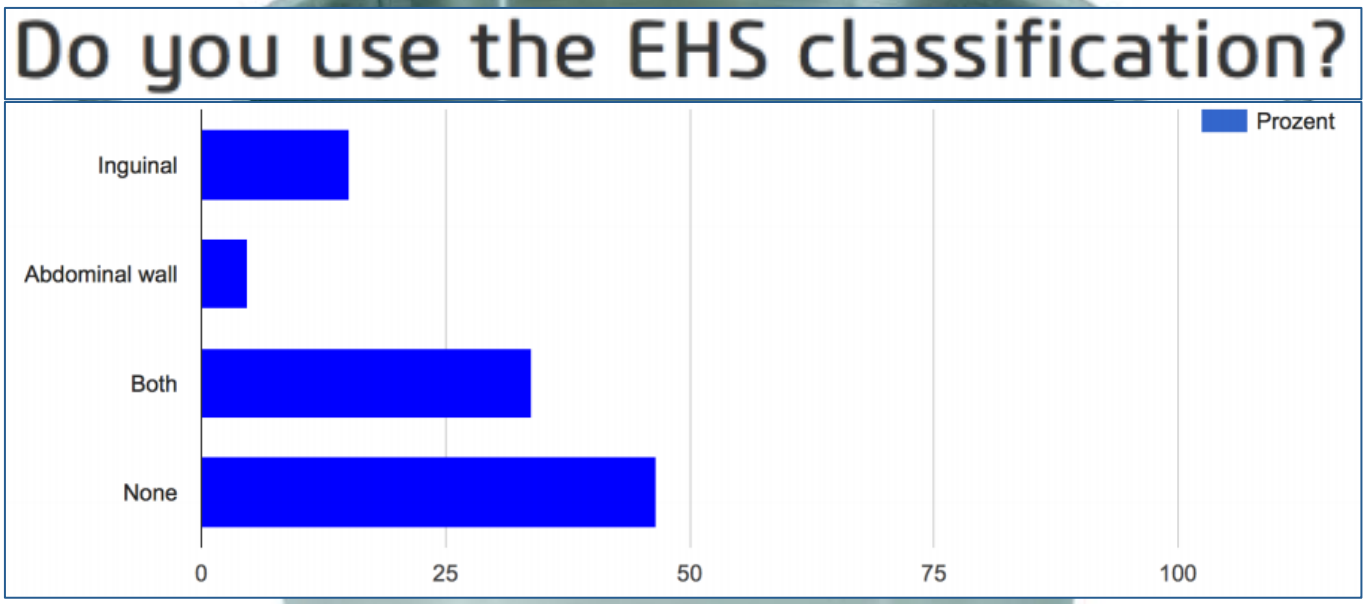


K. Junge · R. Rosch · U. Klinge · R. Schwab
Ch. Peiper · M. Binnebösel · F. Schenten
V. Schumpelick

Risk factors related to recurrence in inguinal hernia repair: a retrospective analysis

- 10 yr-follow-up
- 229 Patients with 293 Shouldice-Repairs from 1992

Importance of Classification

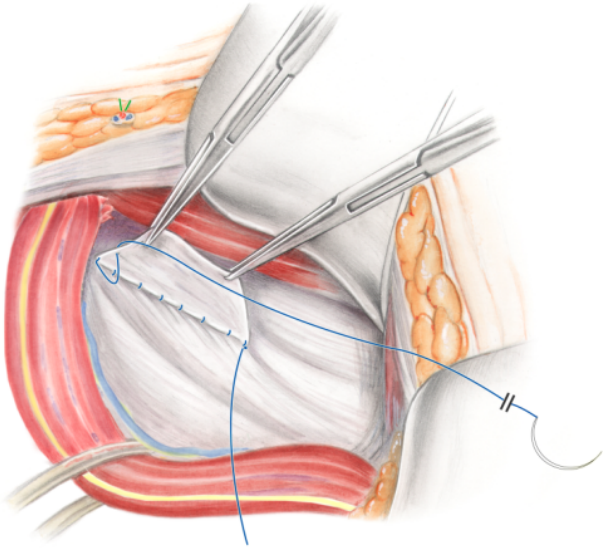


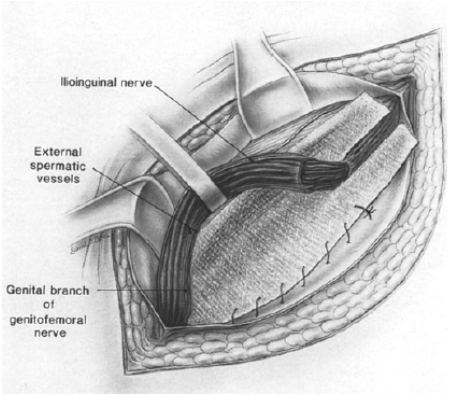
rnia classication: simple

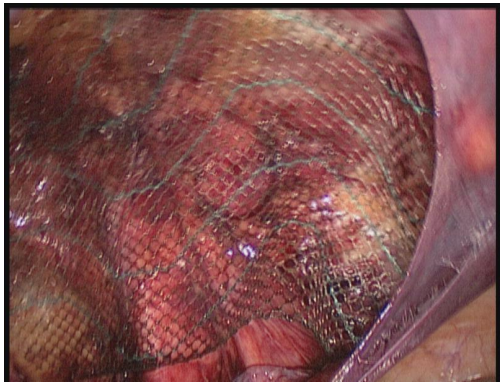
D. Cuccurullo ·
ndala · J. P. Palot ·
lament

„tailoring“ in Herniasurgery?

When does the hernia need a suture?







When does the hernia need a mesh?

When does the hernia need a mesh ...

K. Junge · R. Rosch · U. Klinge · R. Schwab
Ch. Peiper · M. Binnebösel · F. Schenten
V. Schumpelick

Risk factors related to recurrence in inguinal hernia repair: a retrospective analysis

Risc factor		Odds ratio	p
Type	recurrent vs. primary	**3.4**	**0.01**
Localisation	medial/combined vs. lateral	**1.7**	0.27
Size	> 3 cm vs. < 3 cm	**1.5**	0.46
Age	> 50 years vs. < 50 years	**9.9**	**0.01**
Gender	Male vs. female	**1.8**	0.56
Family	affected vs. not affected	**3.9**	**0.05**
Smoking	smoker vs. nonsmoker	**4.0**	**0.01**

Hernia (2006)

When can a suture repair be considered ...

K. Junge · R. Rosch · U. Klinge · R. Schwab
Ch. Peiper · M. Binnebösel · F. Schenten
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Risk factors related to recurrence in inguinal hernia repair: a retrospective analysis

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Hernia (2006)

Influence of Riskfactors

K. Junge · R. Rosch · U. Klinge · R. Schwab
Ch. Peiper · M. Binnebösel · F. Schenten
V. Schumpelick

Risk factors related to recurrence in inguinal hernia repair: a retrospective analysis

		Primary	Recurrent		
	0	1 (< 1.5 cm)	2 (1.5 – 3 cm)	3 (> 3 cm)	X
L		0%	0%	6.6%	
M		0%	4.6%	7.4%	
F					

Recurrence after Shouldice-Repair

10 yr follow-up

Hernia (2006)

European Hernia Society guidelines on the treatment of inguinal hernia in adult patients

M. P. Simons · T. Aufenacker · M. Bay-Nielsen · J. L. Bouillot · G. Campanelli · J. Conze · D. de Lange · R. Fortelny · T. Heikkinen · A. Kingsnorth · J. Kukleta · S. Morales-Conde · P. Nordin · V. Schumpelick · S. Smedberg · M. Smietanski · G. Weber · M. Miserez

Levels of evidence:

1A	Systematic review of randomised controlled trials (RCTs) with consistent results from individual (homogenous) studies.
1B	RCTs of good quality.
2A	Systematic review of cohort or case–control studies with consistent results from individual (homogenous) studies.
2B	RCT of poorer quality or cohort or case–control studies.
2C	Outcome studies, descriptive studies.
3	Cohort or case–control studies of low quality.
4	Expert opinion, generally accepted treatments.

Elective Surgery

Primary Unilateral

Mesh recommendation:
Lichtenstein or Endoscopic(*)

Primary Bilateral

Mesh recommendation:
Endoscopic(*) or Lichtenstein

Recurrent

After anterior technique

Mesh technique
Endoscopic or open posterior approach

After posterior technique

Mesh technique
Lichtenstein

Chapter 6 Surgical Treatment of Inguinal Hernia

KQ06.a Which r…uinal hernias?

Recommendation	Strong *upgraded

KQ06.b Which …h or non-mesh?

Recommendation	Strong *upgraded
Recommendation	Strong *upgraded

Shouldice technique versus other open techniques for inguinal hernia repair (Review)

Amato B, Moja L, Panico S, Persico G, Rispoli C, Rocco N, Moschetti I

THE COCHRANE COLLABORATION®

The Amato review contains 6 RCT that research Shouldice versus open mesh for inguinal hernia repair. 1565 patients are involved and the mesh repair was always a Lichtenstein technique.

Author	Year	Design	N	f-up	Rec %	Pain	Comments
Kingsnorth	1992	Shouldice Darn plication	322	30m	7pat 4pat		14 training surgeons, no classification
Tran	1992	Bassini-Kirschner Shouldice	72 70	12m	9.7 4.2		after 24 m 9/65=14,3 and 7/65=10.8 no classification
Kux	1994	Shouldice 4 rows Shouldice 2 rows Bassini absorb. Bassini non abs.	750	24m	3.6 2.3 12.8 8.7		no classification
Paul	1994	mod. Bassini Shouldice	125 119	3.3y	9.6 1.7*		= 0.005) as the additional main factor for the development of recurrence no classification

direct hernia main factor for recurrence in Shouldice

LIMITATIONS

Author	Year	Design	N	f-up	Rec %	Pain	Comments
Barth	1998	Shouldice Lichtenstein	75 75	Short term			short-term outcomes do not differ; no classification
McGillicuddy	1998	Shouldice Lichtenstein	337 371	60m	2 0.5		Classification only into direct/indirect More direct hernia recurred
Danielsson	1999	Shouldice Lichtenstein	89 89	12m	10.1 0		no classification,
Arvidsson	2005	Shouldice TAPP	454 466	61m	6.7 6.6		
Butters	2007	Shouldice Lichtenstein TAPP	93 93 94	52m	8.1 1.3 1.2		no classification

LIMITATIONS

Recurrence Rate range for individual surgeons 0-23%

Recurrence in Shouldice 20:1 in favor direct hernia

Shouldice vs. Lichtenstein

In the discussion the authors conclude that the review is flawed by:

- low quality of RCT,
- non-blind outcome assessment,
- high lost to follow-up rates,
- no patient-oriented outcomes
- potential bias concerning surgical technique.

Nevertheless the large number of patients and consistent results do make results reliable

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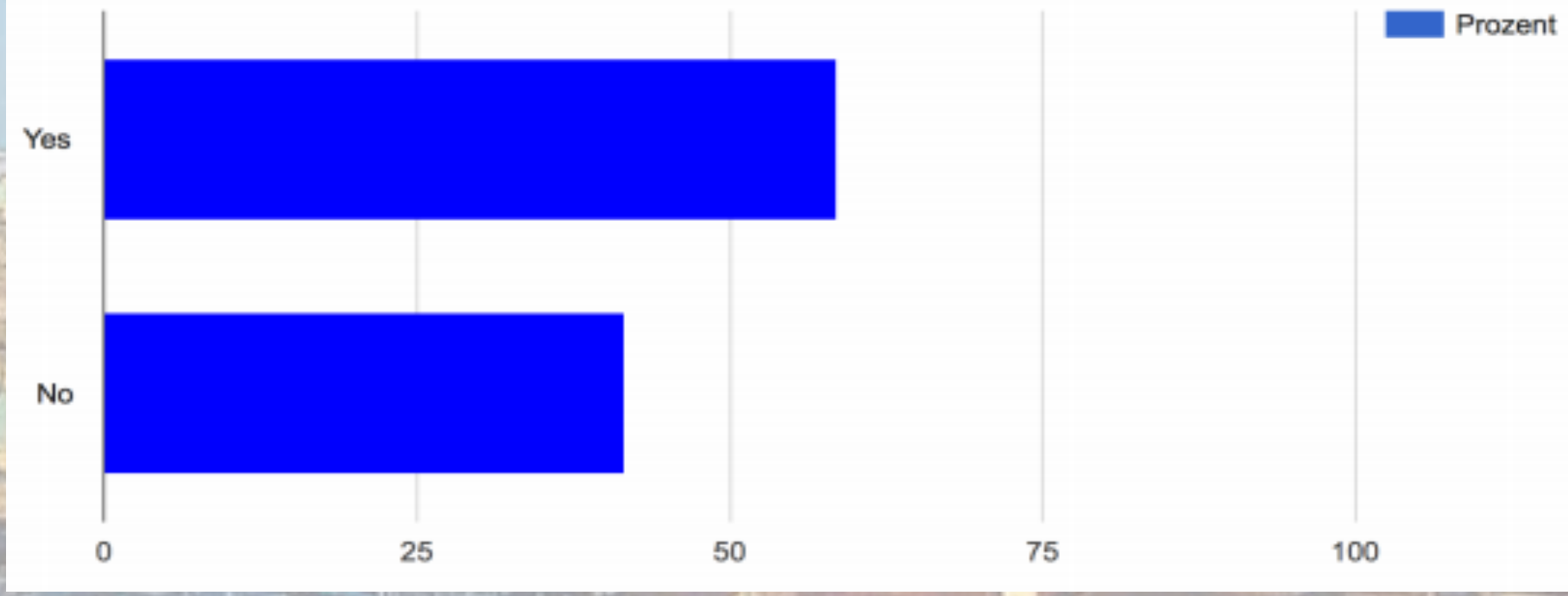
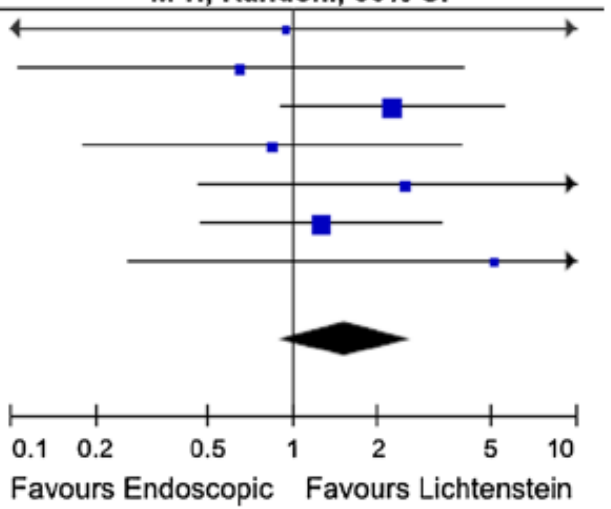
Is there a place for tissue repair – meshfree techniques in inguinal hernia repair?



Study or Subgroup	Endoscopic Events	Endoscopic Total	Lichtenstein Events	Lichtenstein Total	Weight	Odds Ratio M-H, Random, 95% CI
Butters	1	81	1	76	3.6%	0.94 [0.06, 15.26]
Douek	2	122	3	120	8.6%	0.65 [0.11, 3.96]
Eklund	14	594	7	659	33.6%	2.25 [0.90, 5.61]
Hallen	3	69	4	78	11.9%	0.84 [0.18, 3.90]
Heikkinen	5	62	2	59	9.9%	2.50 [0.47, 13.42]
Langeveld	10	264	7	231	29.1%	1.26 [0.47, 3.37]
Wright	3	149	0	107	3.2%	5.14 [0.26, 100.48]
Total (95% CI)		**1341**		**1330**	**100.0%**	**1.53 [0.90, 2.59]**
Total events	38		24			

Heterogeneity: Tau² = 0.00; Chi² = 3.37, df = 6 (P = 0.76); I² = 0%

Test for overall effect: Z = 1.56 (P = 0.12)



Guide·line

A **guideline** is a statement by which to determine a course of action. A guideline aims to streamline particular processes according to a set routine or sound practice. By definition, following a guideline is never mandatory. Guidelines are not binding and are not enforced

Update with level 1 studies of the European Hernia Society

DOGMEN **on the treatment of inguinal hernia in adult patients**

M. Miserez · E. Peeters · T. Aufenacker · J. L. Bouillot · G. Campanelli · J. Conze · R. Fortelny · T. Heikkinen · L. N. Jorgensen · J. Kukleta · S. Morales-Conde · P. Nordin · V. Schumpelick · S. Smedberg · M. Smietanski · G. Weber · M. P. Simons

Dọg·ma

The doctrine with claim of absolut validity

IT'S ALL IN THE TAILORING

- **intra-operative „tailoring“ of mesh necessity in dependancy of the classification**

  ….. possible only in open procedures!

- **pre-operative „tailoring“ of the surgical approach is independent from hernia classification**

„It is just a hernia“

- **Misconception** of the anatomy and physiology of the abdominal wall
- **Misconception** of the complexity of repair
- **Misconception** of the learning curve
- **Misconception** of surgical results!
- **Misconception** of the consequences for the patient!

Why „Tailorin

- *CAVE* Monocult
- Not every herni
- Not every mesh
- Importance of surgical expertise is highly underestimated
- Patients preference for a mesh free procedure

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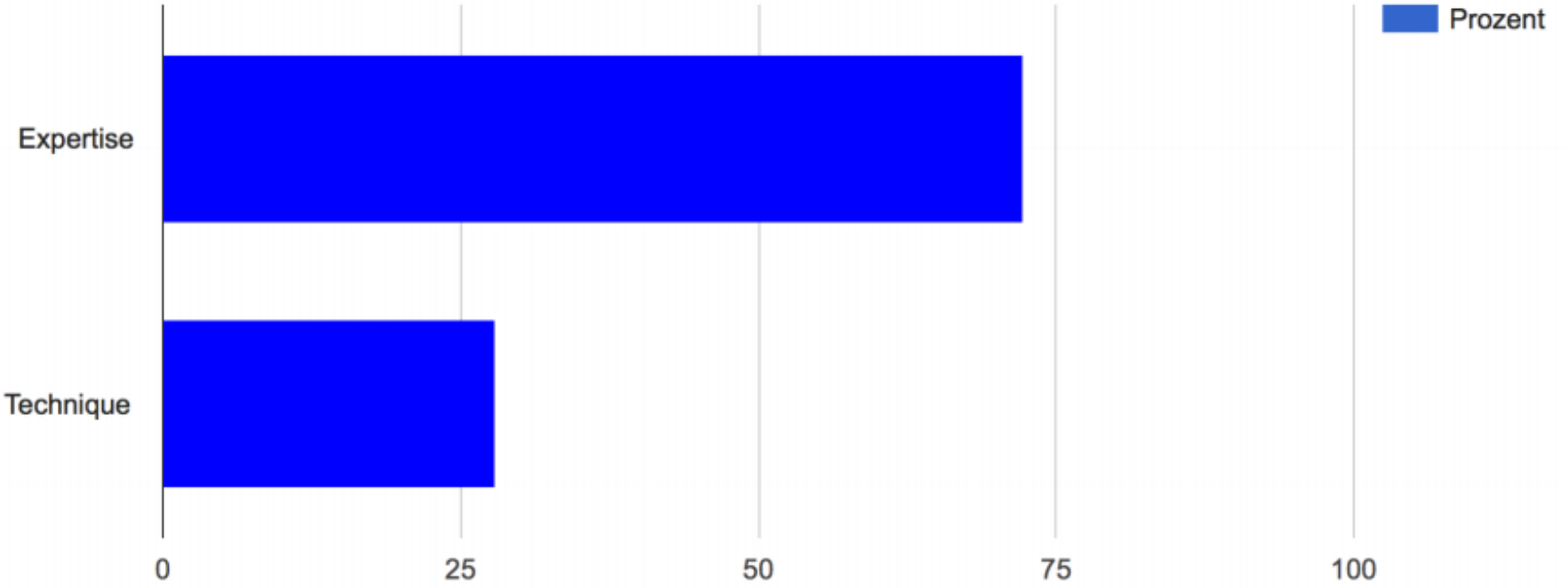
What is more important – surgical expertise or technique?



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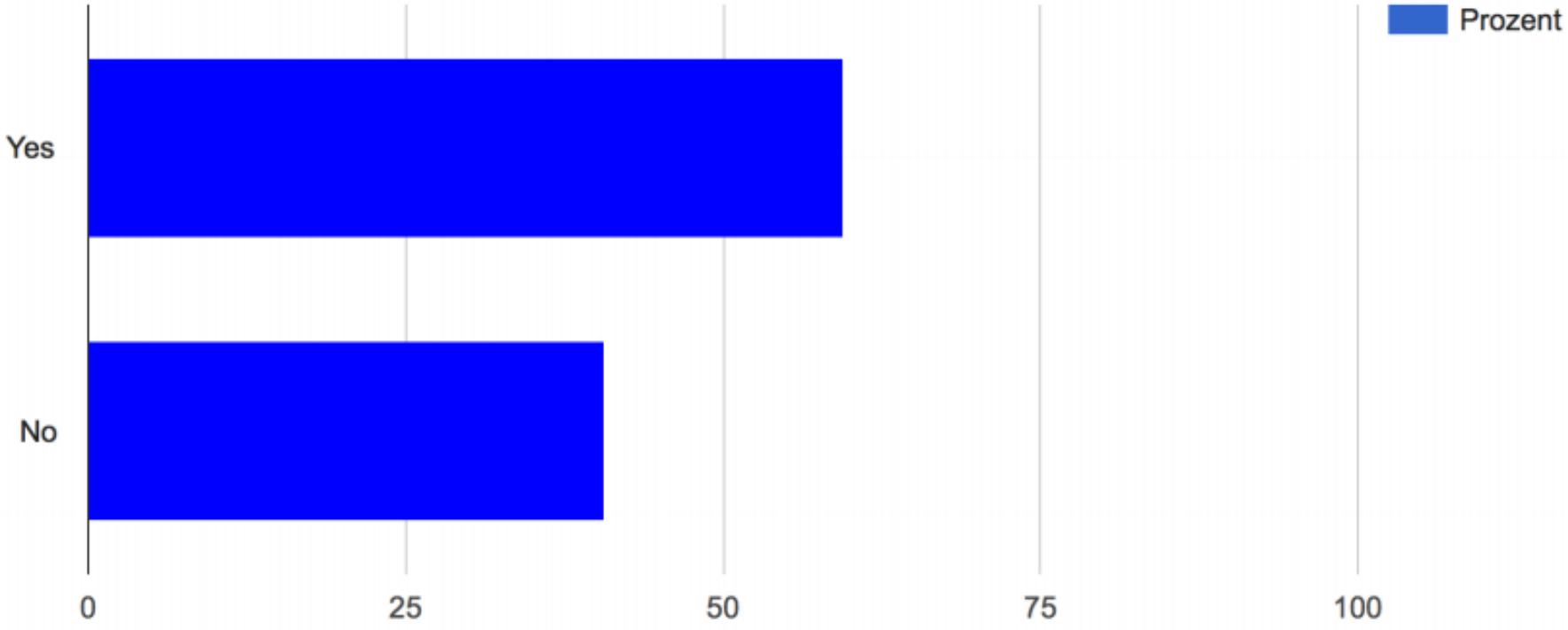
Should herniology become a speciality?




➢ Tissue repair has become a rarity
➢ Local anaesthesia has become a rarity
➢ Teaching of suture repair has become a rarity
We are far away
from „tailoring“ in hernia
surgery!!


EHS 2017 VIENNA
Dinner
EUROPEAN HERNIA SOCIETY
President's Dinner
Jean François GILLION