

THE ROLE OF PURE TISSUE REPAIRS IN A TAILORED CONCEPT FOR INGUINAL HERNIA REPAIR

Dr. Andreas Koch FACS • Day Surgery and Hernia Center • Gerhart-Hauptmann-Str. 15 • D-03044 Cottbus • info@chirurgie-cottbus.com
Ralph Lorenz MD • 3CHIRURGEN • Klosterstrasse 34/35 • D-13581 Berlin • lorenz@3chirurgen.de

Background

Robert Bendavid 2013: „After 120 years of Pure Tissue repairs, 50 years of Mesh repairs and 20 years of laparoscopic repairs, we are finally reaching some interesting conclusions All three techniques, in terms of recurrence, are EQUIVALENT !!!“

With or without mesh? • *Amato B, Moja L, Panico S, Persico G, Rispoli C, Rocco N, Moschetti I. • Cochrane Database Syst Rev. 2012 Apr 18;4:CD001543.

Shouldice technique versus other open techniques for inguinal hernia repair.

Sixteen trials contributed to this review. A total of 2566 hernias: Shouldice herniorrhaphy is the best non-mesh technique in terms of recurrence, though it is more time consuming and needs a slightly longer post-operative hospital stay.

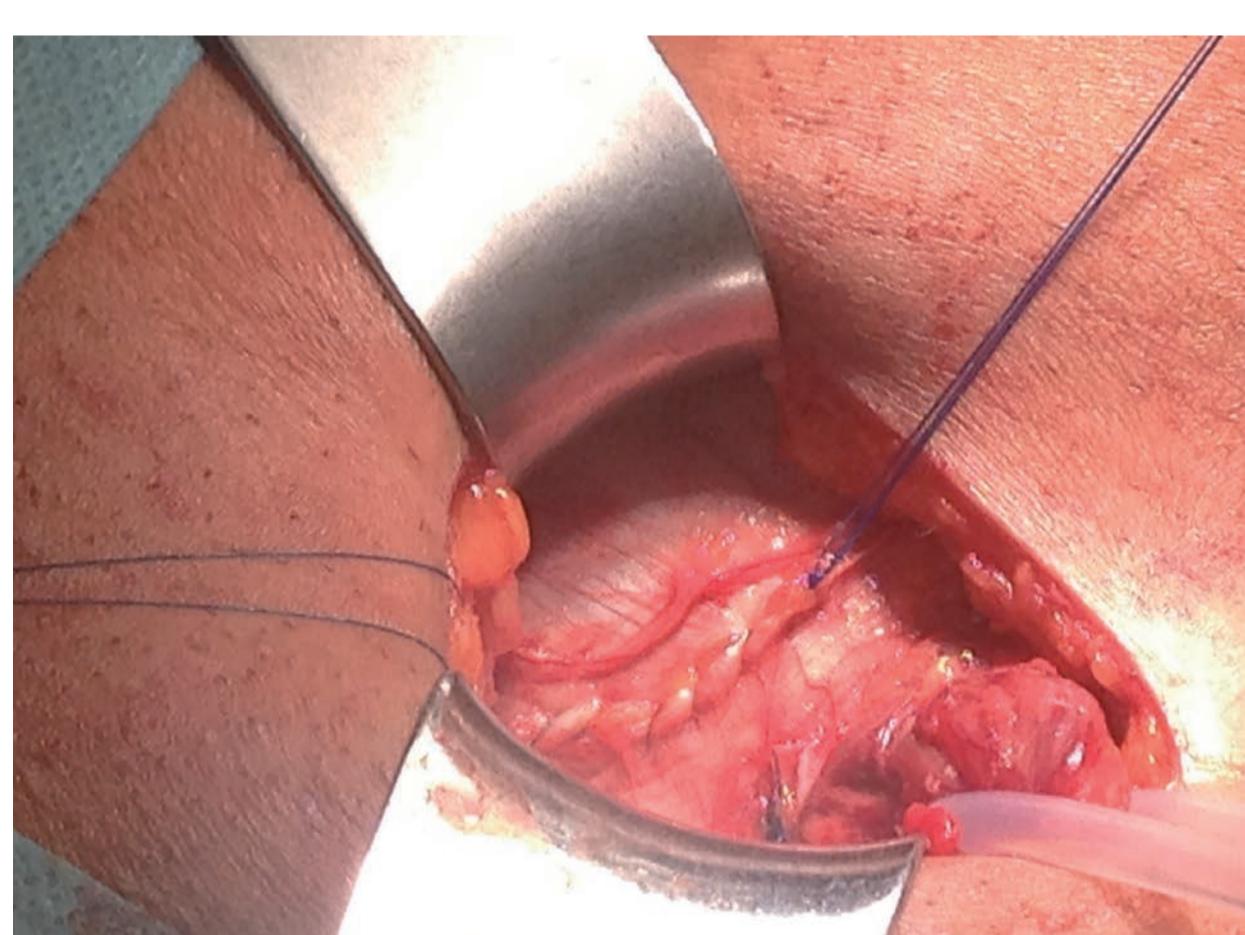
- The use of mesh is associated with a lower rate of recurrence. The quality of included studies, assessed with Jadad scale, were low.
- Patients have similar characteristic in the treatment and control group but seems more healthy than in general population, this features may affect the dimension of effect in particularly recurrence rate could be higher in general population.
- The length of follow-up vary broadly among the studies from 1 year to 13.7 year.

Methods

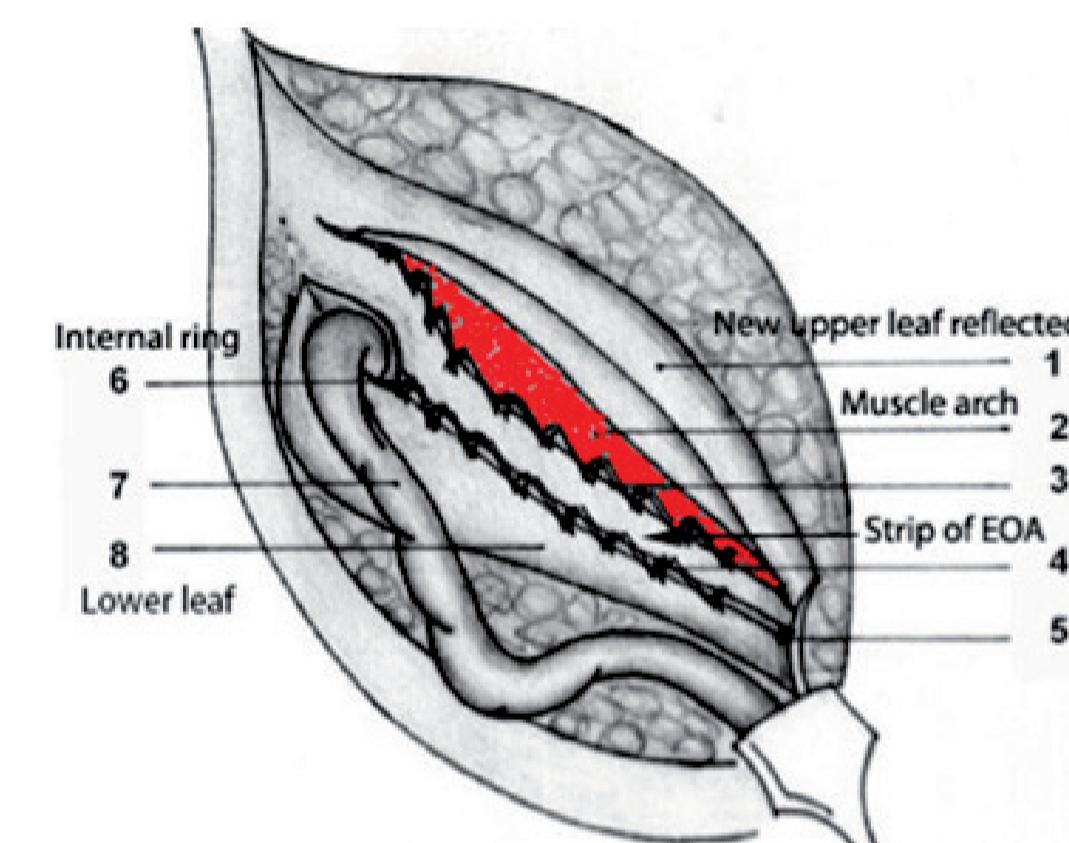
EHS-Classification:

M,C,L,F = medial, combined, lateral, femoral • R* 0-x = Recurrence
I = up to 1,5 cm • II = 1,5 to 3 cm • III = more than 3 cm

Desarda Repair

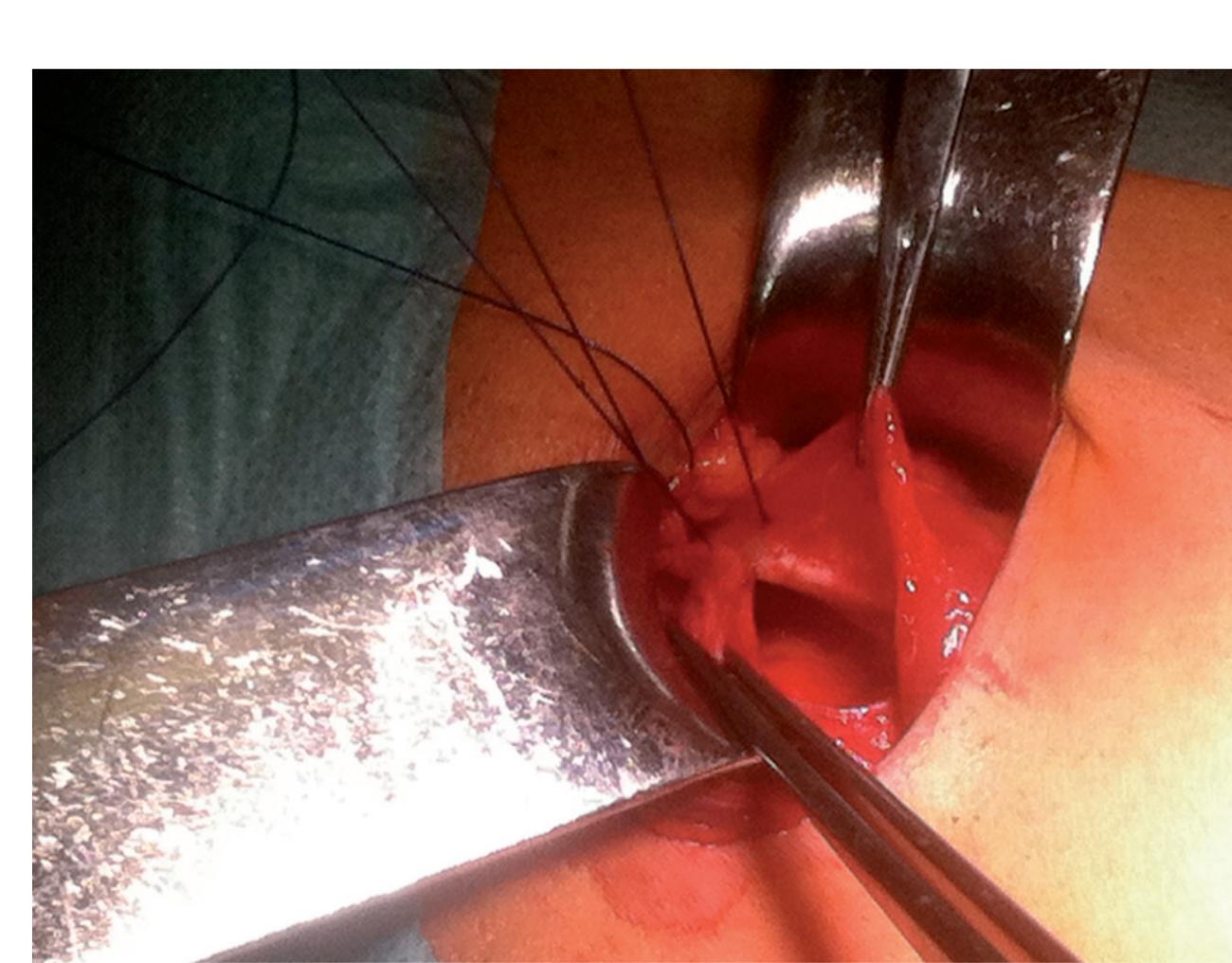
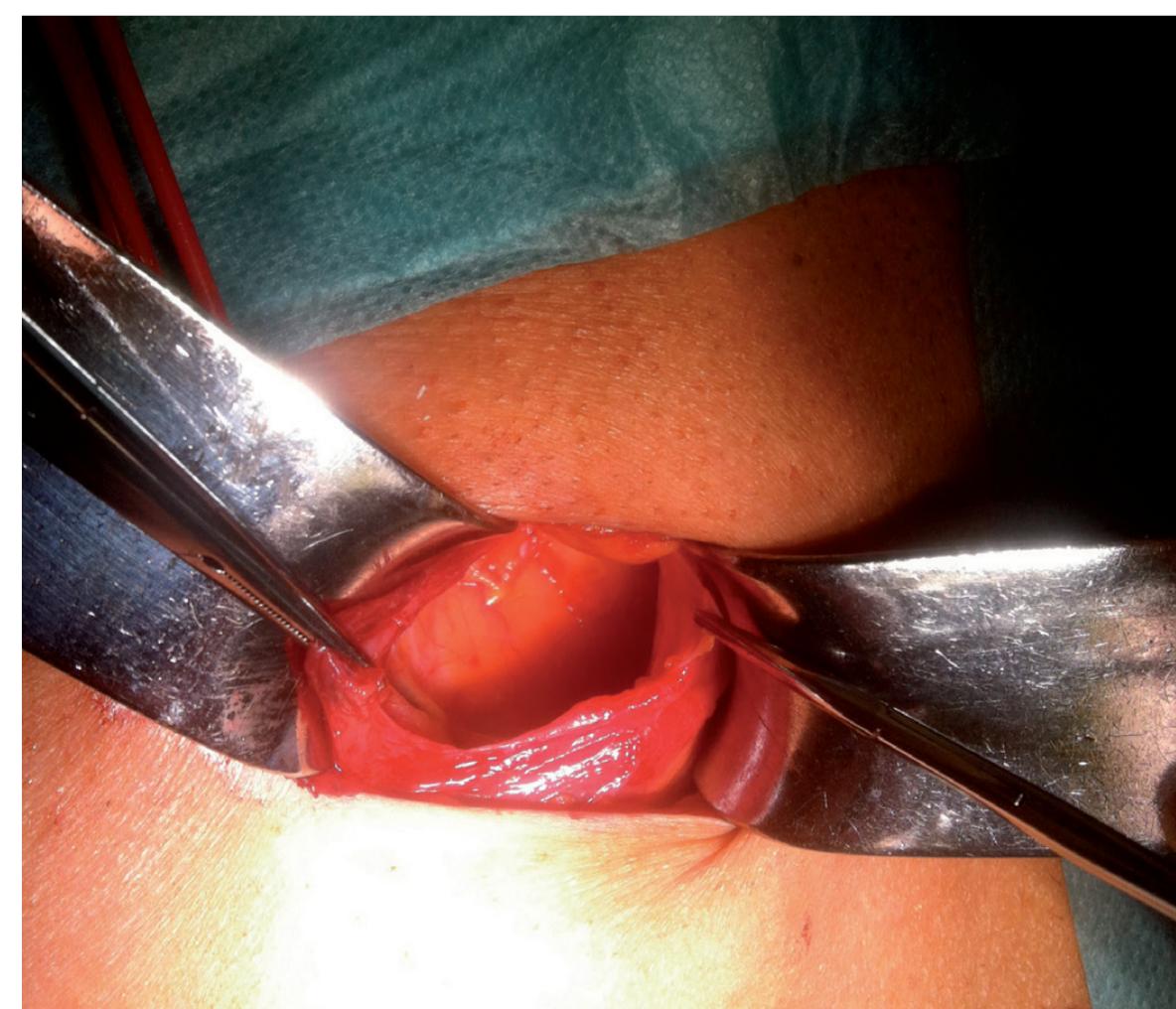


Preoperative Type III L



1 year postoperative

Shouldice Repair



Results

Own results: 1.1.2006 - 31.07.2013 • Follow up 6 month to 7 years
Median Age: 48 ys. • N = 1.572 • Suture n= 597 (38%) • Recurrence 0,5%
Mesh n= 975 (62%) • Recurrence 0,7% • Total Recurrence Rate 0,7%

Pure Tissue Repairs: Shouldice: 373 • Recurrence n= 2 (0,5%)

Desarda: 142 • No Recurrence until 1.1.2014

Minimal Repair: 86 • Recurrence n= 1 (1,2%)

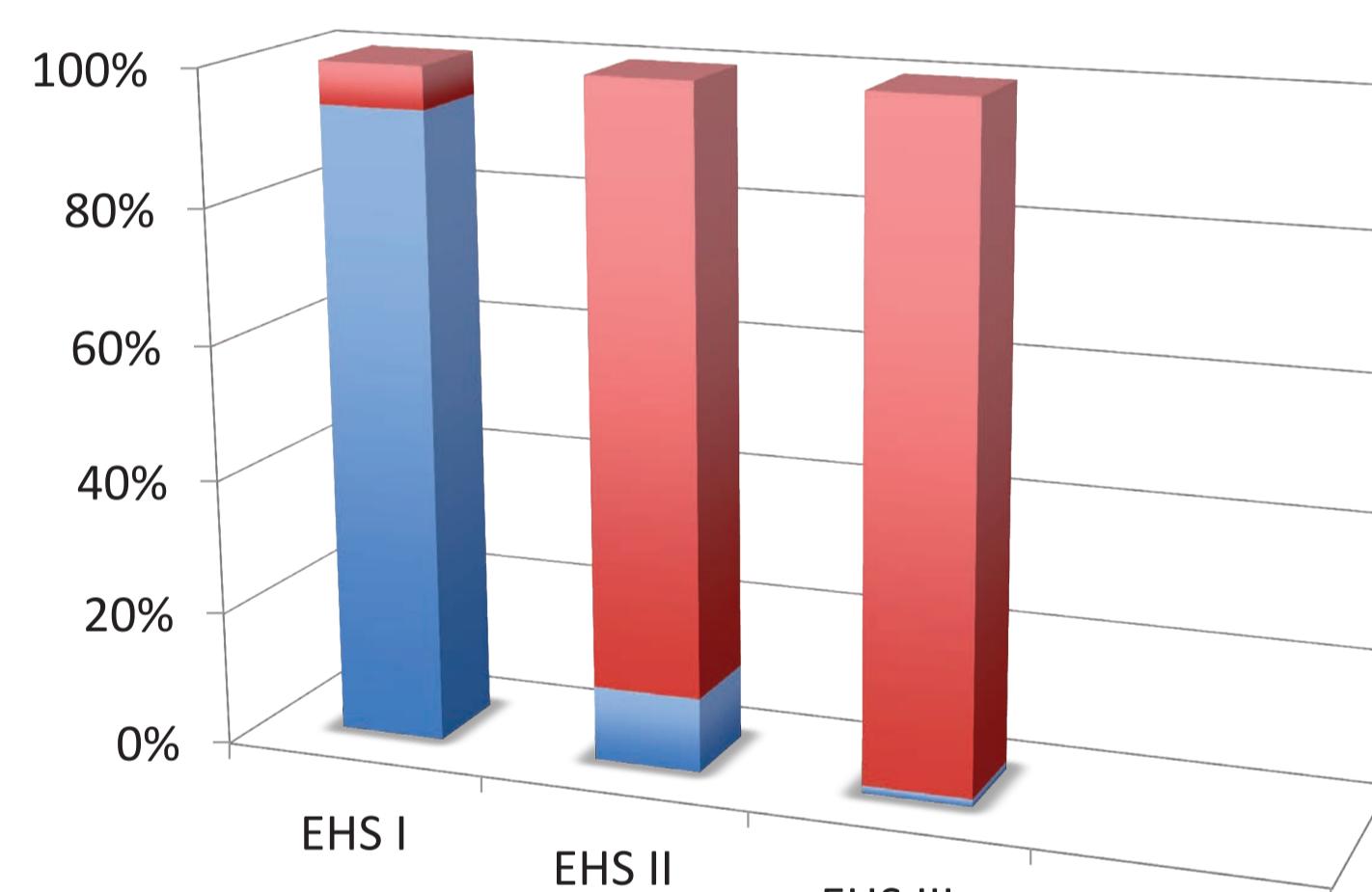
Own Results

EHS	Mesh	Suture
I L	0,1 %	27,8%
I M	0,5%	46,0%
I C	1,8 %	10,8 %
II L	10,7 %	3,1 %
II M	24,1 %	8,8 %
II C	11,6 %	2,0 %
III L	9,1 %	0,6 %
III M	25,7 %	0,9 %
III C	16,2 %	0
Total	820 (70%)	352 (30%)

↑ 96,5%

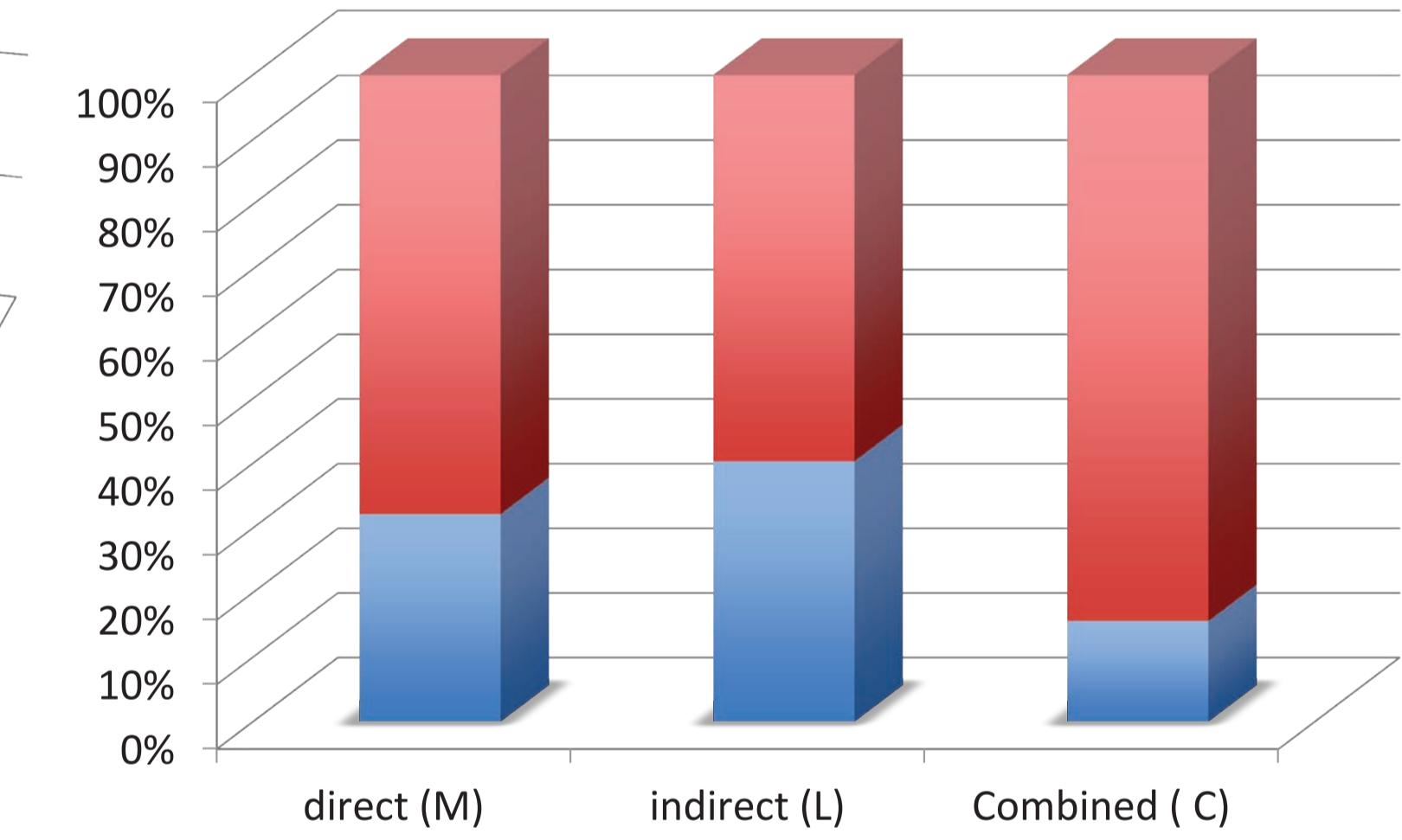
↓ 86,7%

Suture vs. Mesh depending on EHS Classification

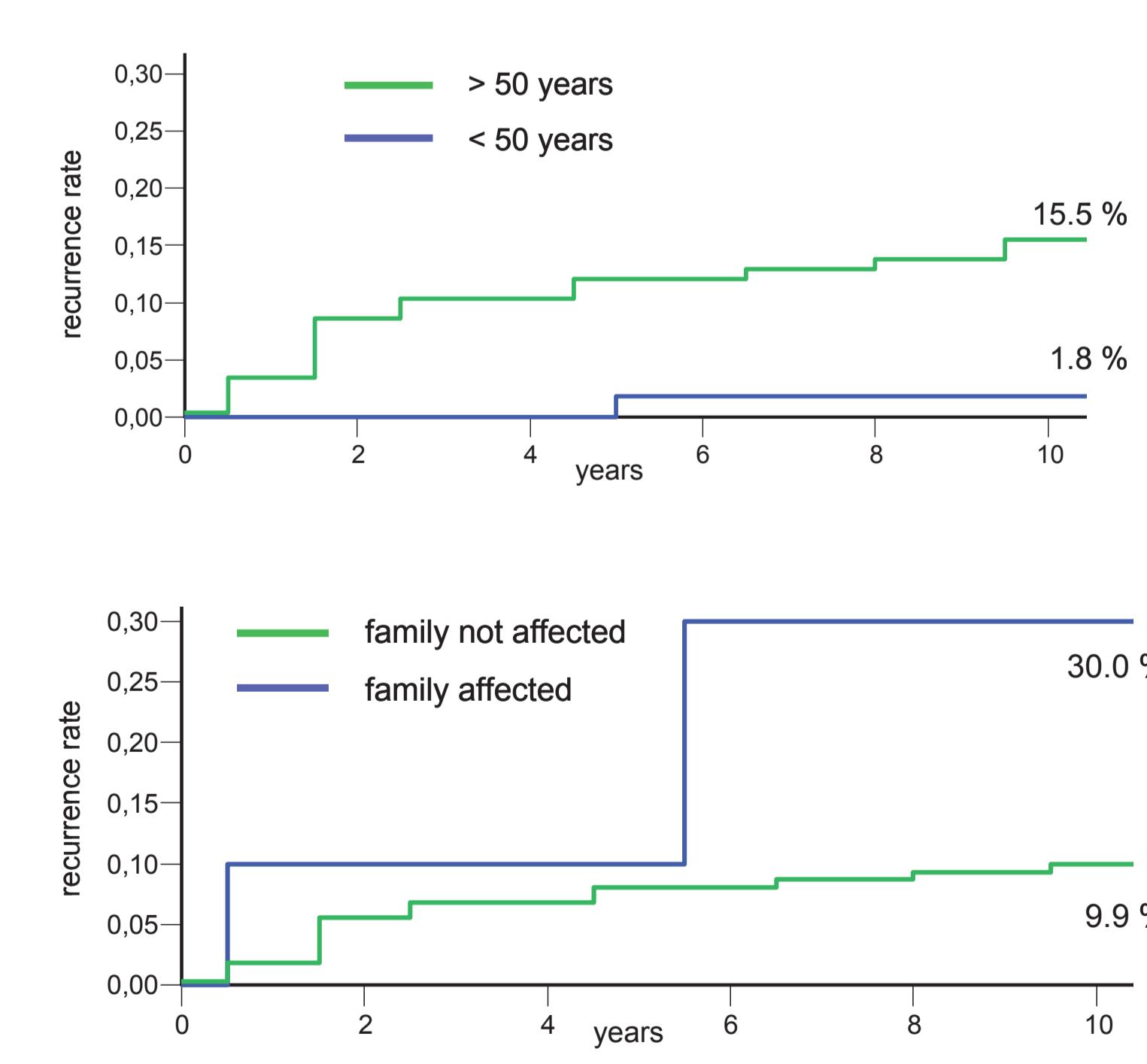
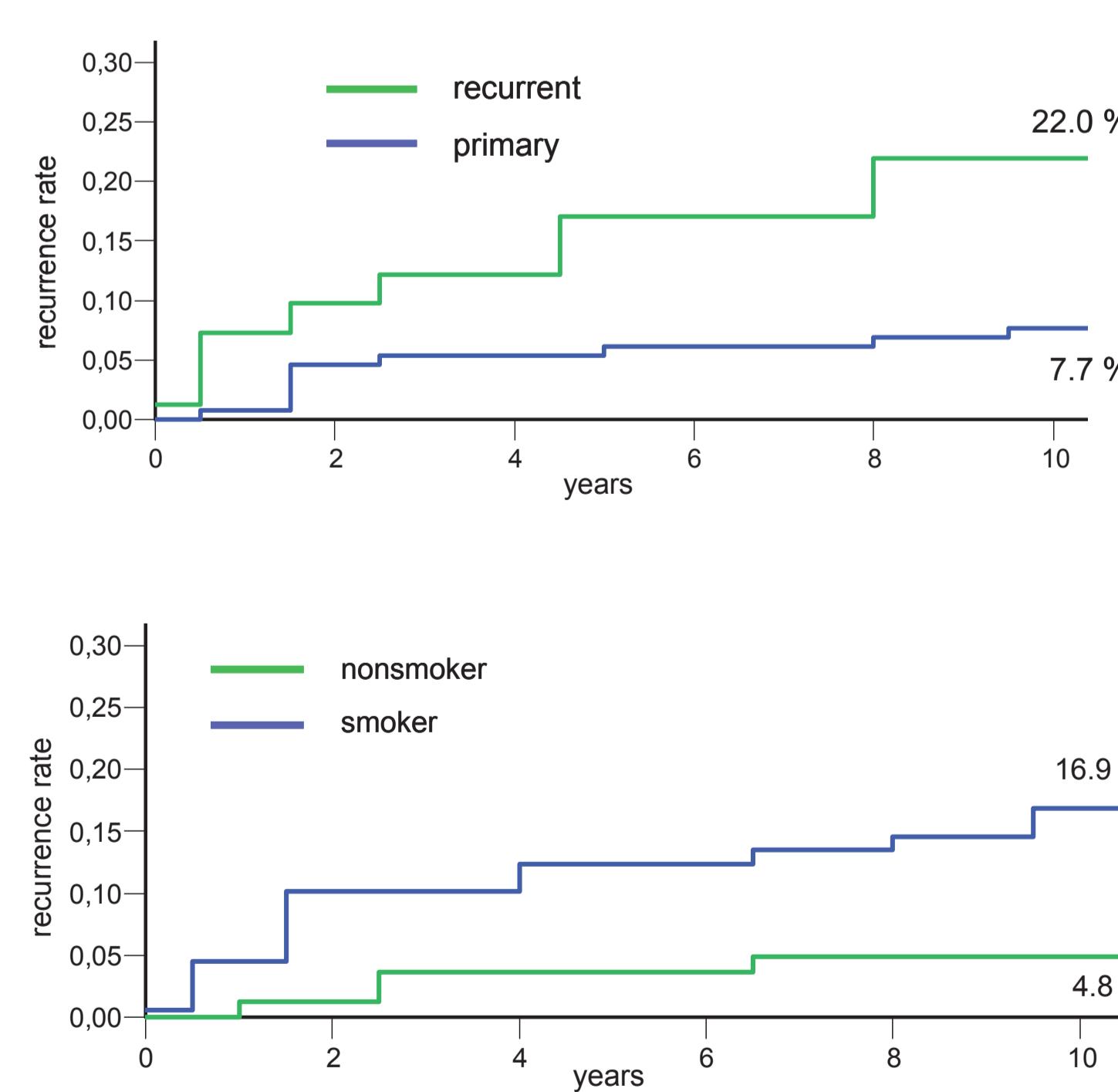


Mesh
Suture

Suture vs. Mesh depending on Localisation



Hernia. 2006 Aug;10(4):309-15. Epub 2006 May 23.
Risk factors related to recurrence in inguinal hernia repair: a retrospective analysis.
Junge K, Rosch R, Klinge U, Schwab R, Peiper Ch, Binnebösel M, Schenten F, Schumpelick V.



If 2 or more Risk factors the mesh repair should be the first choice!

Conclusion

The EHS Guidelines consider only the hernia itself • There is no real evidence for Mesh techniques in every case yet! • No differentiation based on the own classification! • EHS I – II in young males the Suture Techniques are the best option with low recurrence rates • Future studies need to consider the classification!

INDIVIDUALIZED CONCEPT! RISK FACTORS! EHS CLASSIFICATION!

Mesh in case of EHS III M or more than 2 Risk factors • Minimal Repair EHS I M without Risk factors • Shouldice EHS I and IIL and I M with Risk factors • Desarda EHS II M and EHS II C also EHS III L