

**LAPAROSCOPIC
TOTALLY EXTRAPERITONEAL
(TEP)
VERSUS
OPEN PREPERITONEAL HERNIOPLASTY**

Poschong Suesat , MD

The Evolution of Hernia Repair



Medscape®

<http://www.medscape.com>



Medscape®

<http://www.medscape.com>

Milestones in Hernia Repair

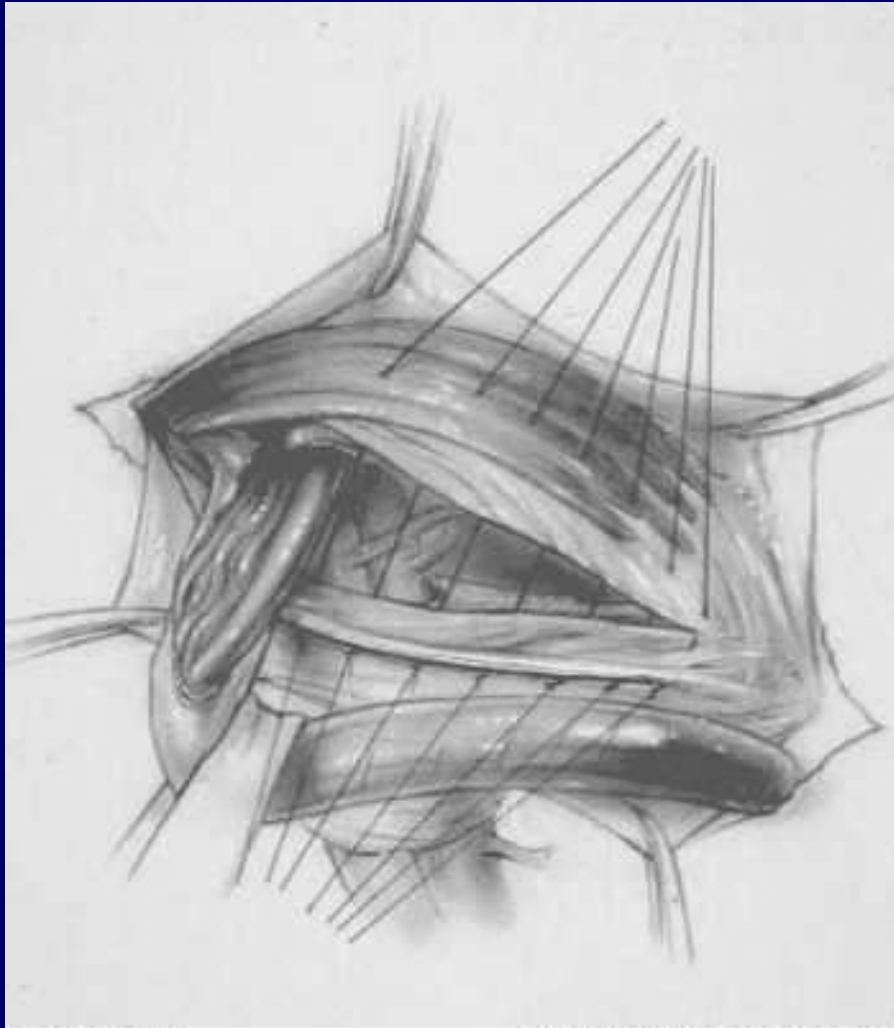
Marcy (1871) Publication of original paper on antiseptic herniorrhaphy ("A New Use of Carbolized Catgut Ligature")

Czerny (1876) Described ligating and excising the indirect peritoneal sac through the external ring

Kocher Twisted and suture-transfixed the peritoneal sac in the lateral muscles. through the external ring

MacEwen (1886) Reefed the peritoneal sac into a plug to block the internal ring. Lucas-Championniere Opened the external oblique aponeurosis to expose the entire inguinal canal.

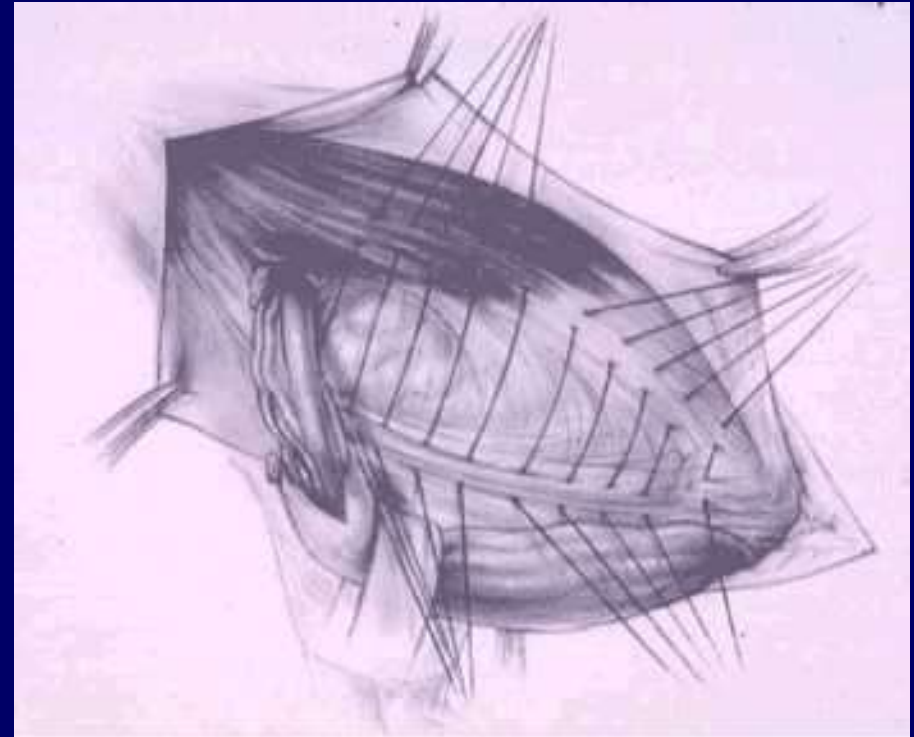
Bassini Operation



Medscape ®

<http://www.medscape.com>

Original Bassini (1887)

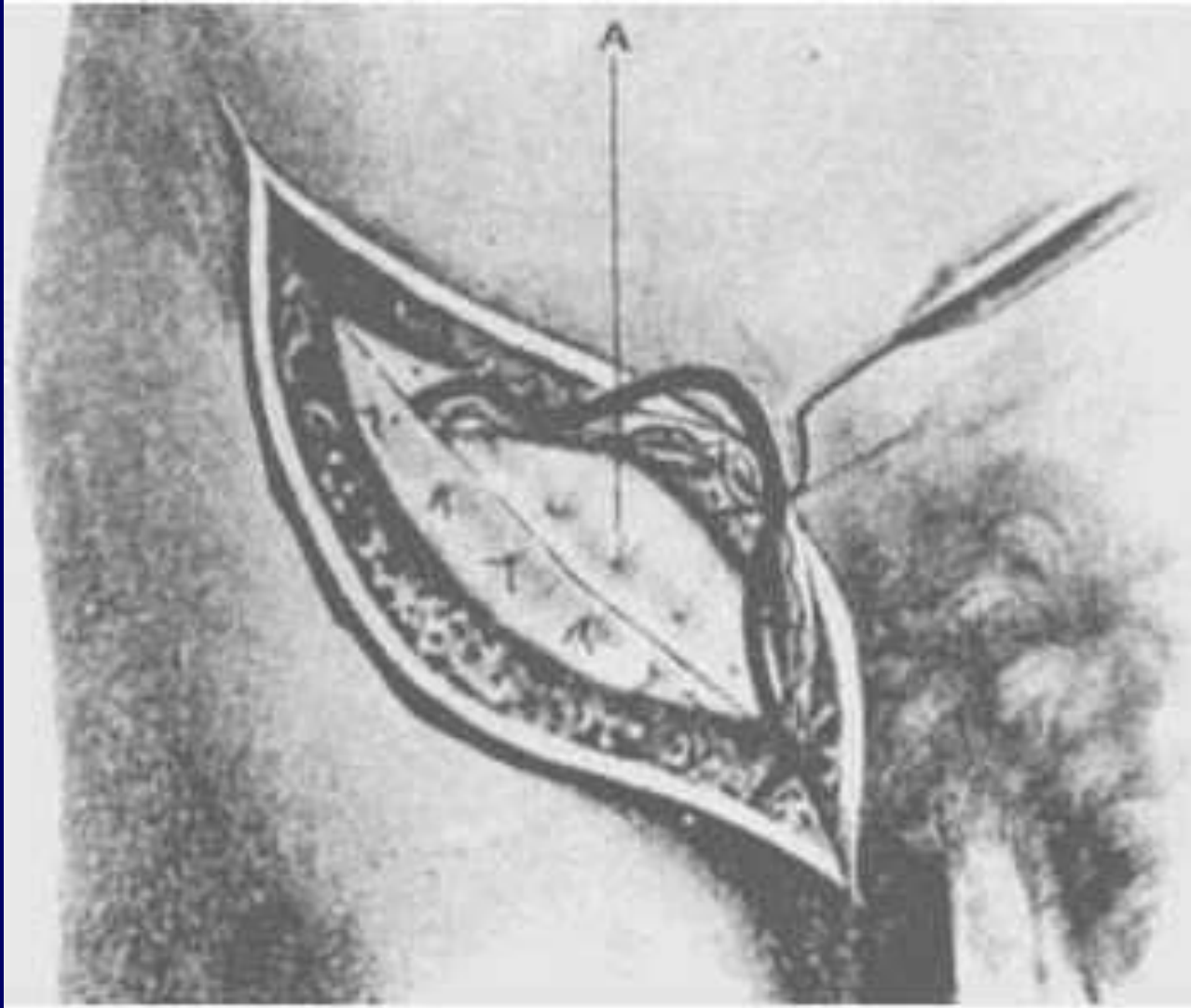


Medscape ®

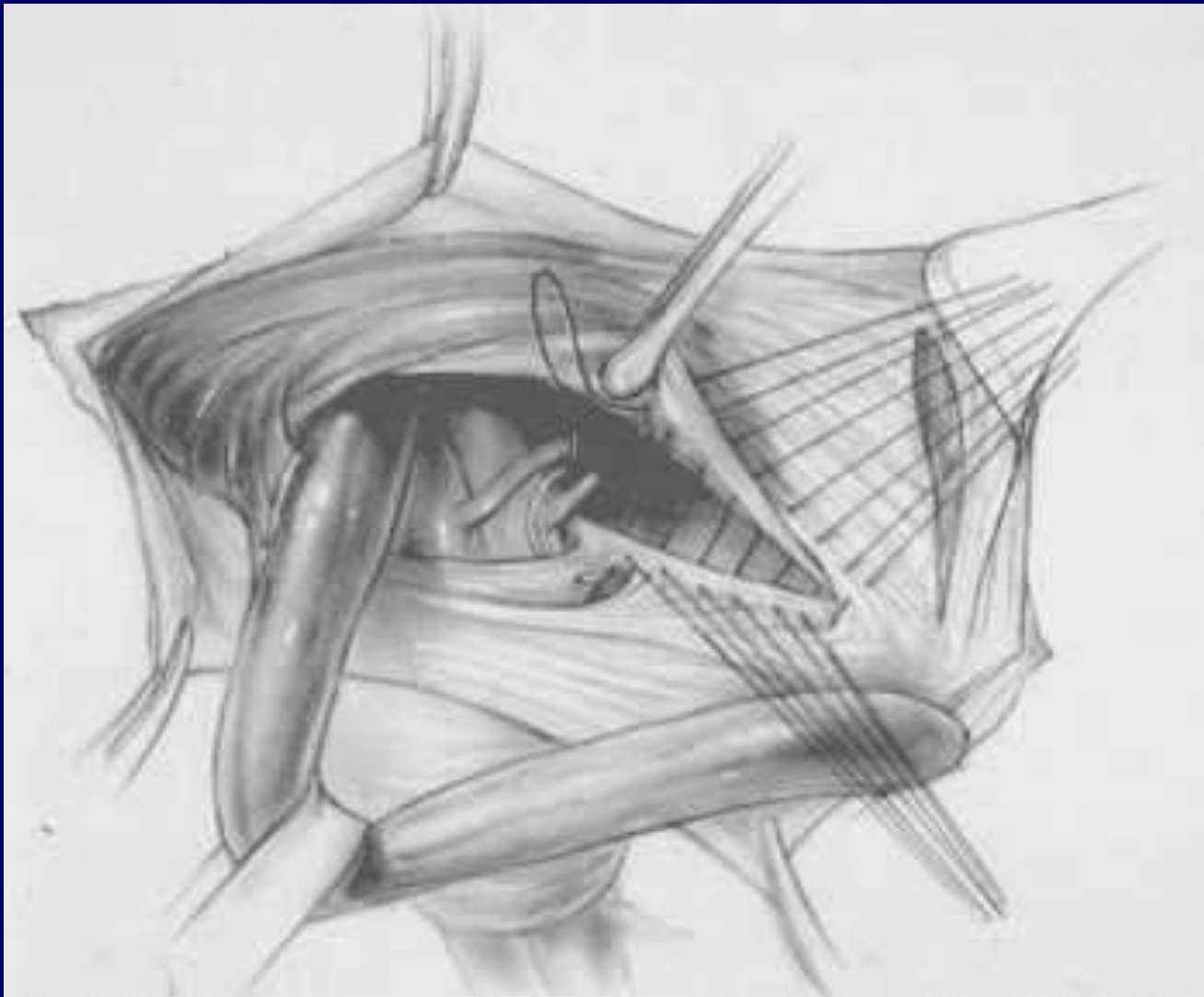
<http://www.medscape.com>

Modified Bassini

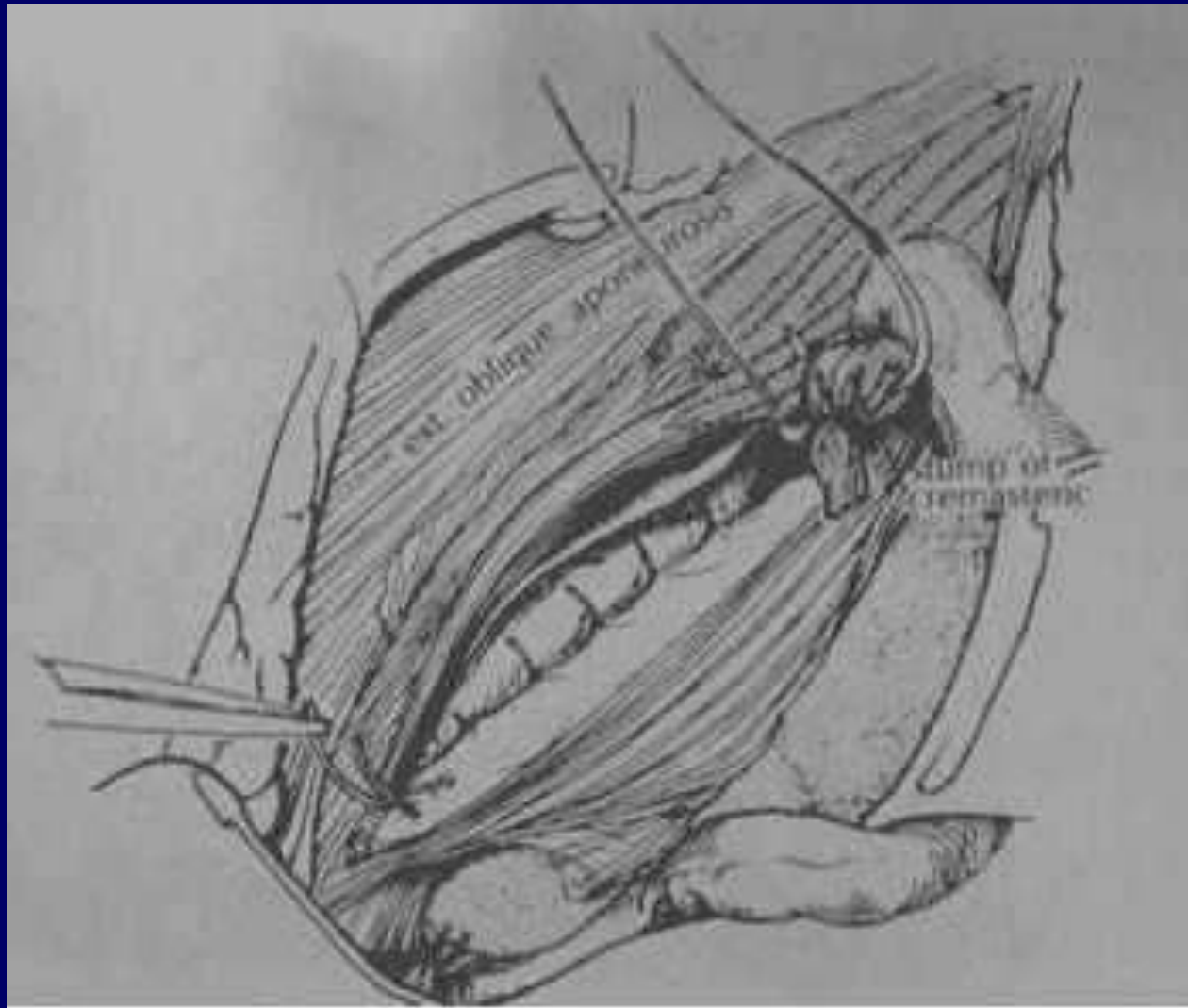
Halsted Operation



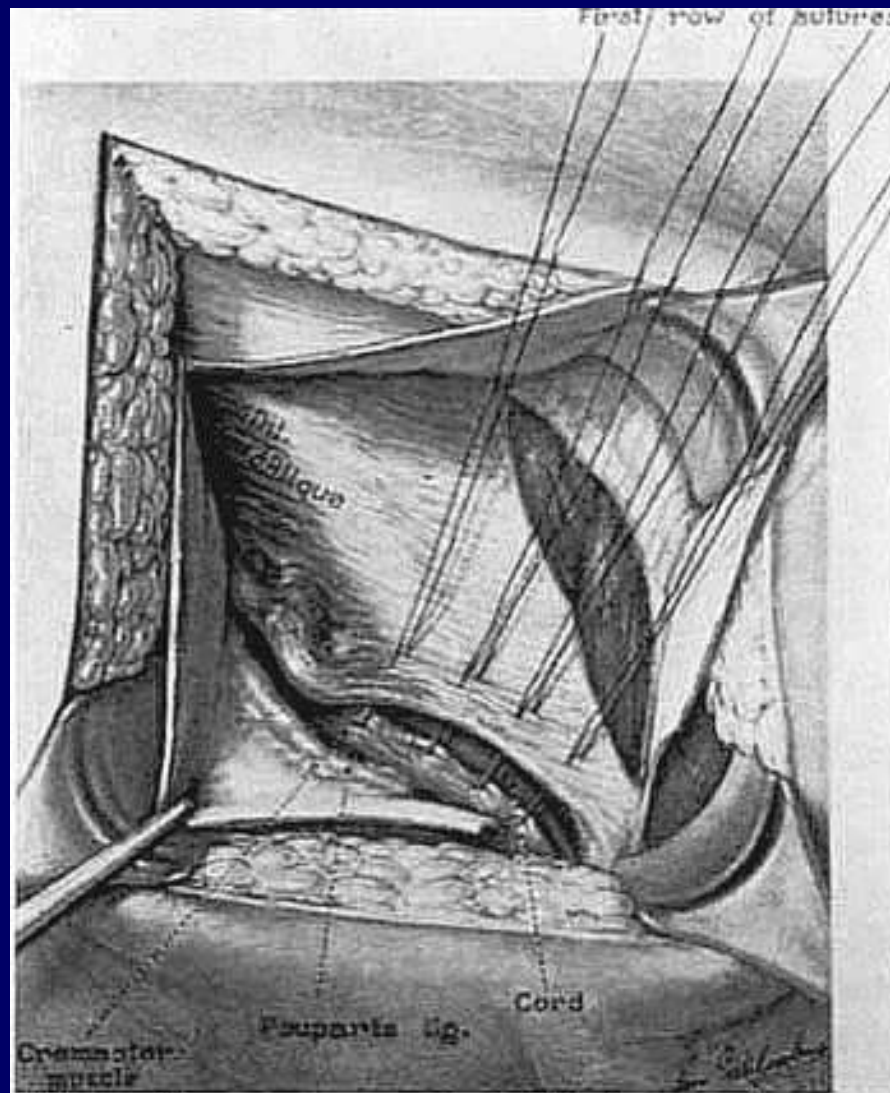
McVay (Cooper Ligament) repairs



Shouldice repair



Relaxing incision



Recurrence rate following the Bassini Inguinal repair of primary inguinal hernias

Author	No. of cases	% follow-up	Years follow-up	Recurrence
Hagan	—	—	—	2.9%
Bassini	262	—	—	3.8%
Marsden	367	—	—	4.0%
Houdard	46	69.6	—	6.2%
Vayre	305	—	—	7.2%
Callum	186	—	5 – 12	7.5%
Chevrel	119	50.0	—	8.4%
Magnusson	305	—	6 – 7	9.6%
Berliner	720	—	4 – 9	11.5%
Piper	246	67.7	—	12.2%
Belenger	1102	33.2	14	25.0%

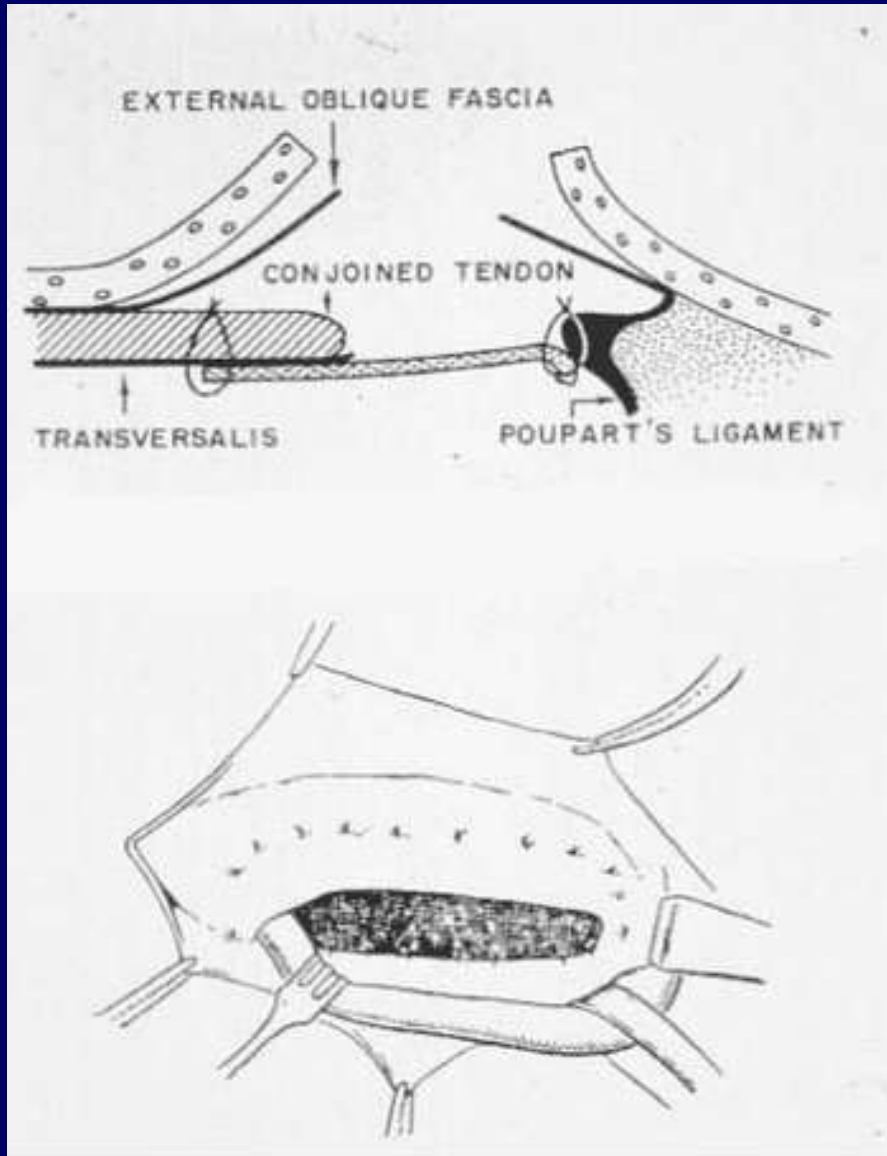
Tension-Free Hernia Repair

Every type of tension-free repair requires a mesh, whether it is done through an open anterior, open posterior, or laparoscopic route.

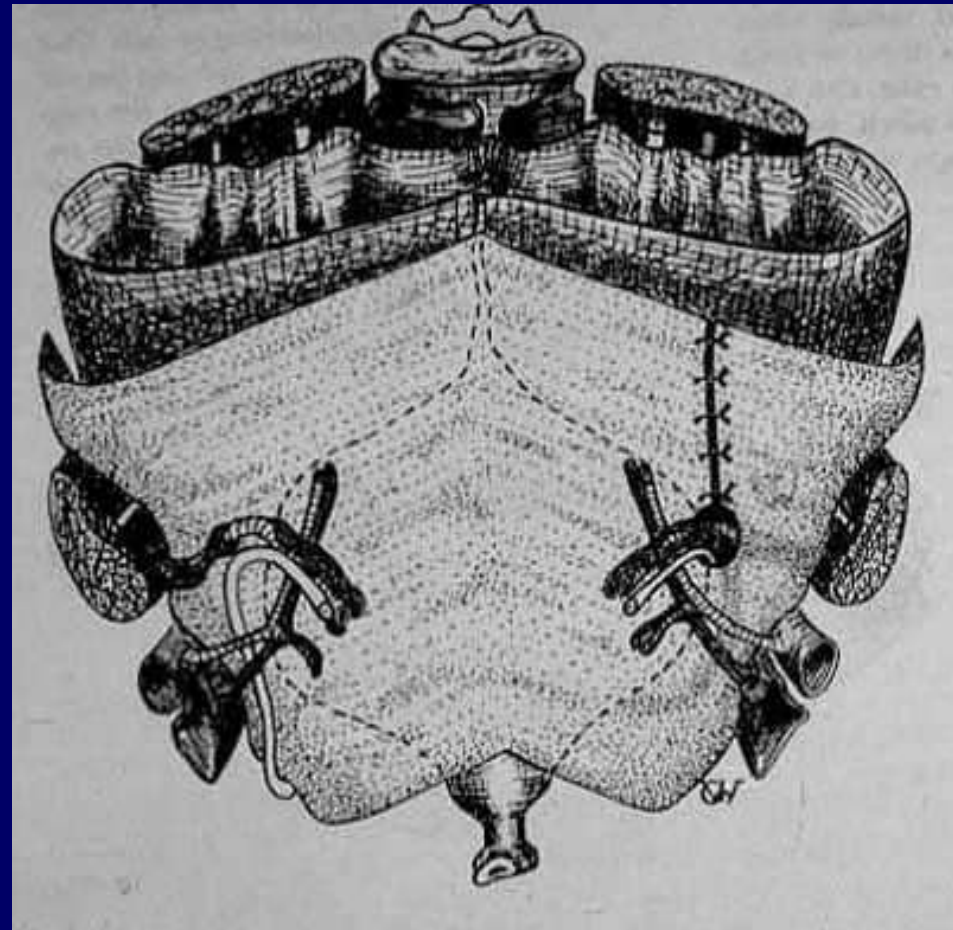
Recurrence rate following Tension-free Repair

- Lichtenstein $< 1\%$, ($0\% - 0.7\%$)
- Open Preperitoneal Repair (Nyhus, Condon, Stoppa) $< 1\%$
- Laparoscopic Hernia Repair $< 1\%$

Usher's repair



Stoppa procedure



Medscape ®

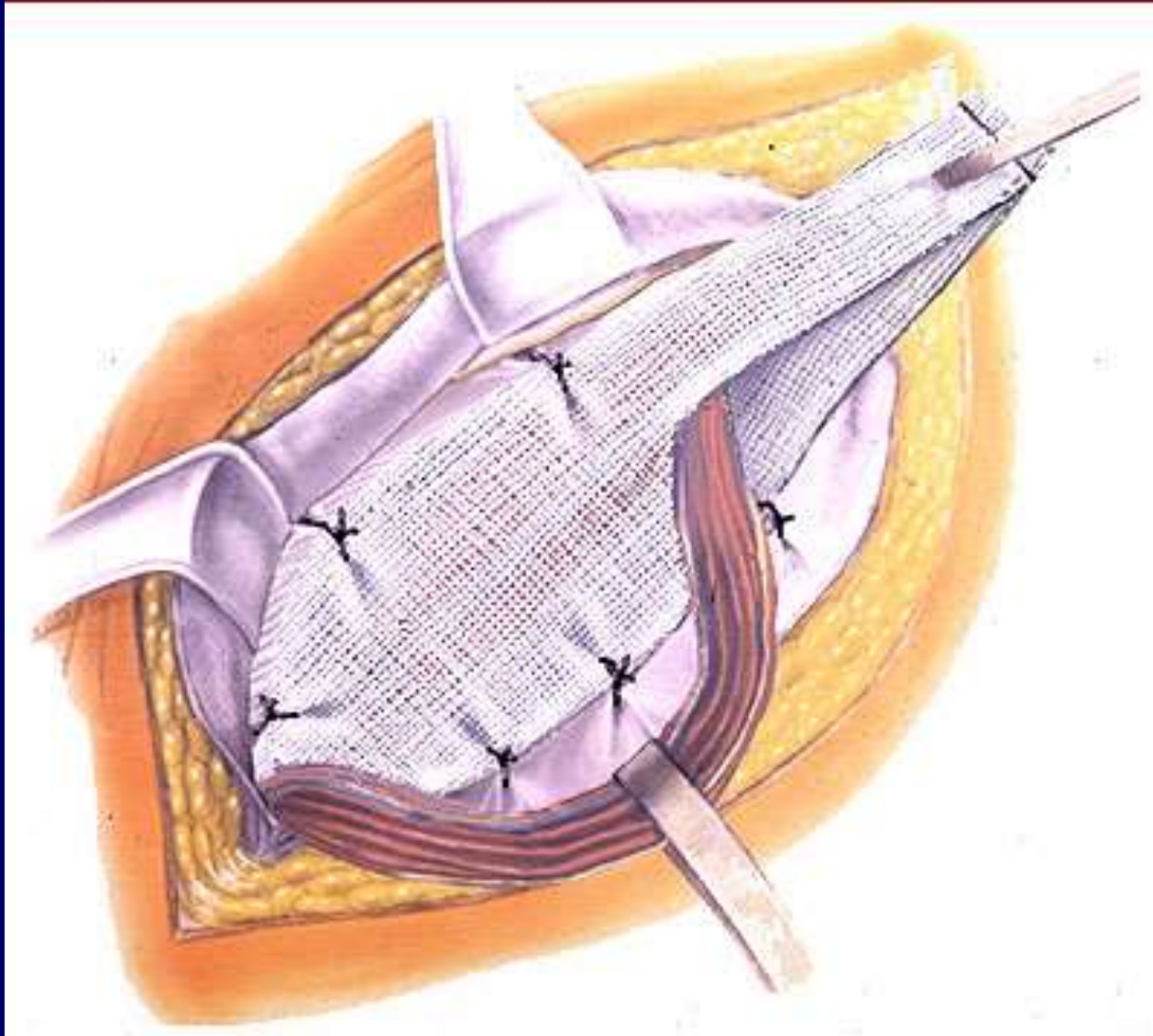
<http://www.medscape.com>

Medscape ®

<http://www.medscape.com>

Lichtenstein Tension-Free Repair

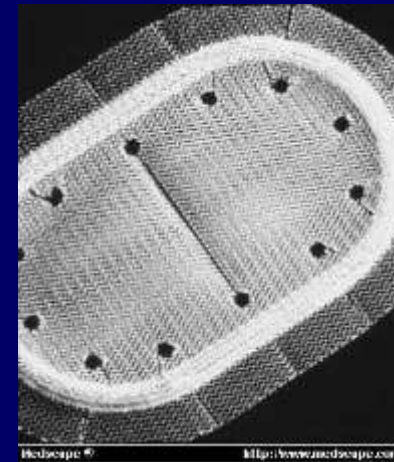
Medscape® www.medscape.com



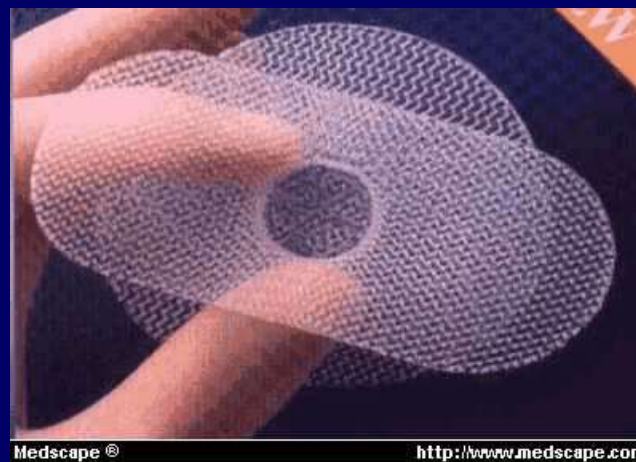
PerFix Plug Repair



Kugel Patch

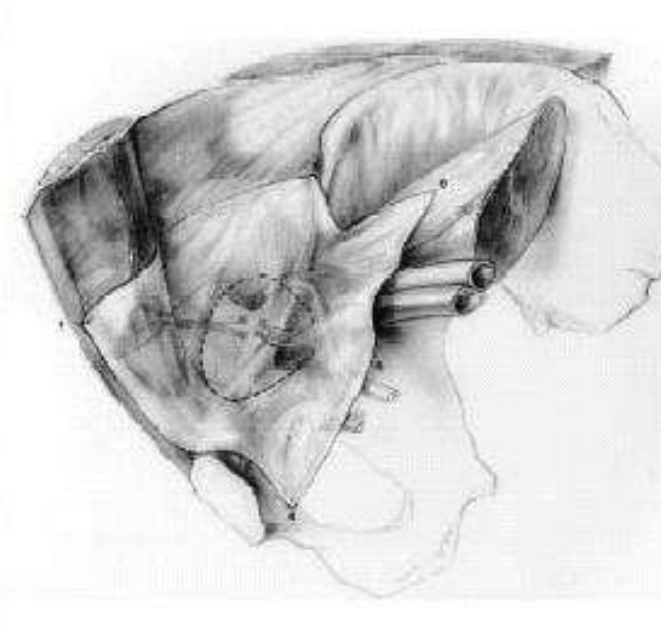
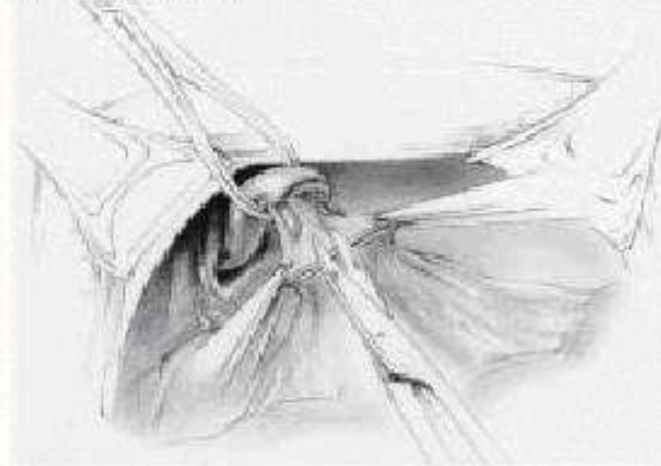


PROLENE Hernia System



Open Preperitoneal Hernioplasty

Open Preperitoneal Hernioplasty



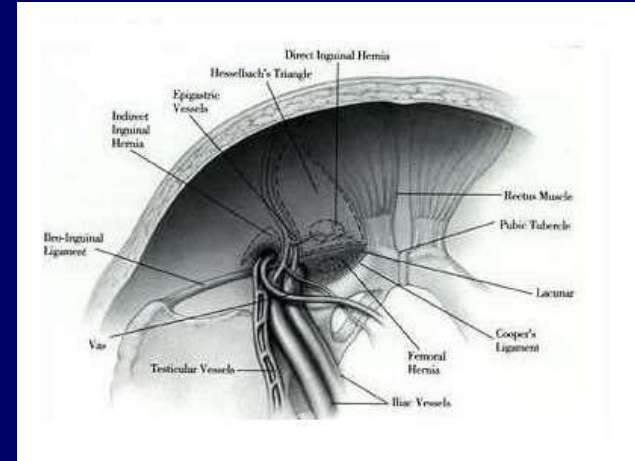
LAPAROSCOPIC TOTALLY EXTRAPERITONEAL (TEP)



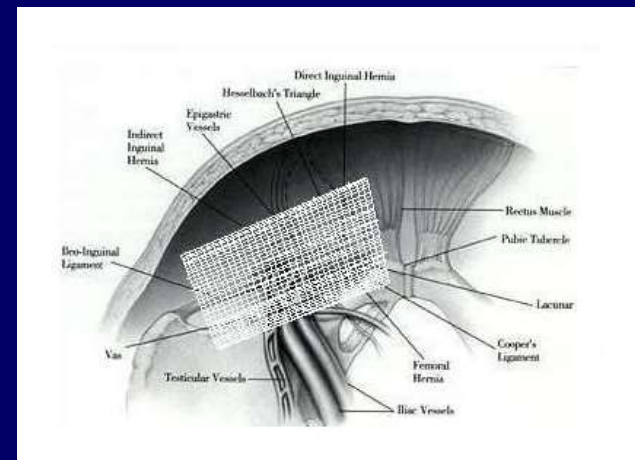
Balloon dissection of the preperitoneal space



Insufflation



Artificial balloon dissector



**LAPAROSCOPIC TOTALLY EXTRAPERITONEAL (TEP)
VERSUS
OPEN PREPERITONEAL HERNIOPLASTY (OP)
(Jan 2002 – Mar 2004)**

	TEP	OP	T-test
Patient	24	23	
Age	27-88 (56.75+/-14.77)	21-79 (55.13+/-17.30)	P = 0.731
Unilateral	16	7	
Bilateral	9	15	
Operative time	40-120 min. (63.12+/-18.22)	30-115 min. (53.78+/-19.15)	P = 0.093
Hospital stay	3.37+/-0.71 days	3.39+/-0.78 days	
Return to work	7.37+/-1.05 days	7.08+/-1.34 days	

OPEN PREPERITONEAL HERNIOPLASTY



LAPAROSCOPIC TOTALLY EXTRAPERITONEAL HERIOPLASTY (TEP)





www.geocities.com/thaisurgery

**THE
END**

