

MESH 2013

PARIS 14 JUIN 2013

The third way to treat Groin hernias:

**The Minimal Open Preperitoneal approach
(minimal access and minimal invasive!)**

Marc Soler, Cagnes sur Mer - France



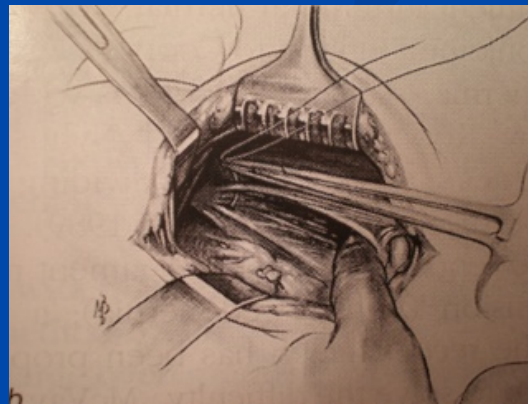
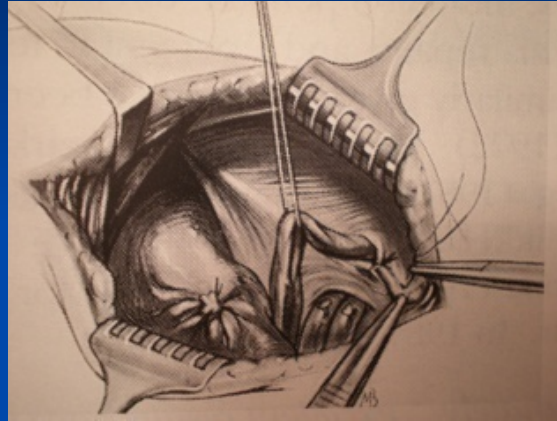
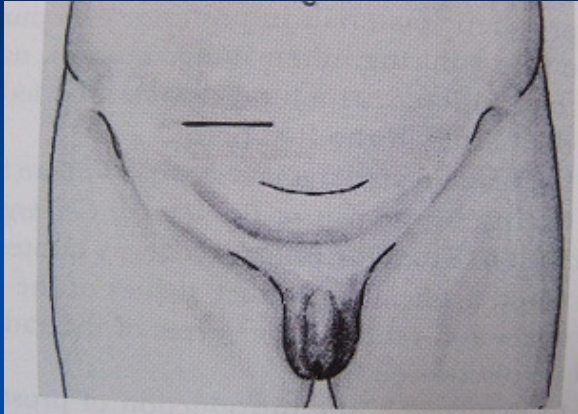
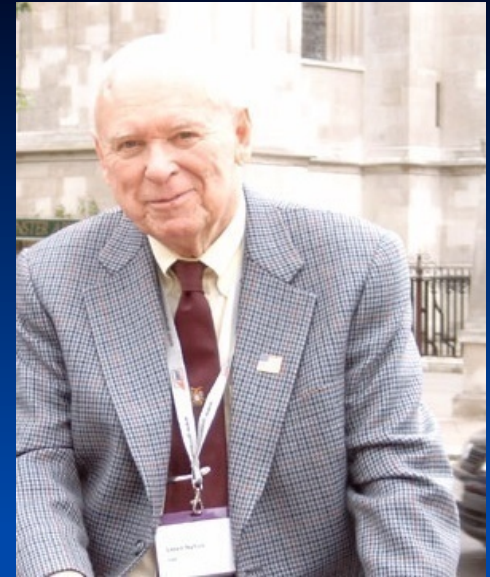
the three surgical way for groin hernia repair with prosthesis

Open surgery

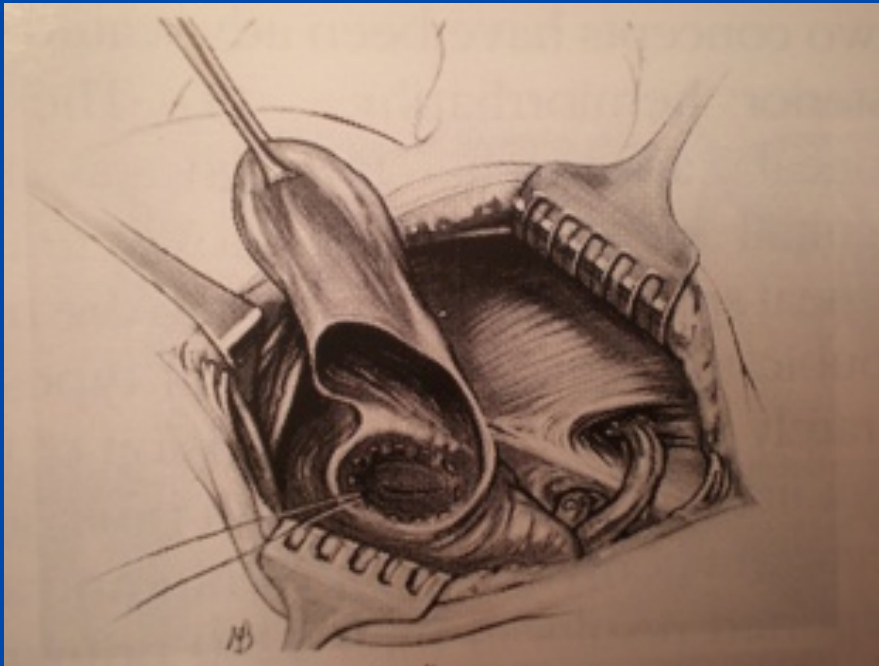
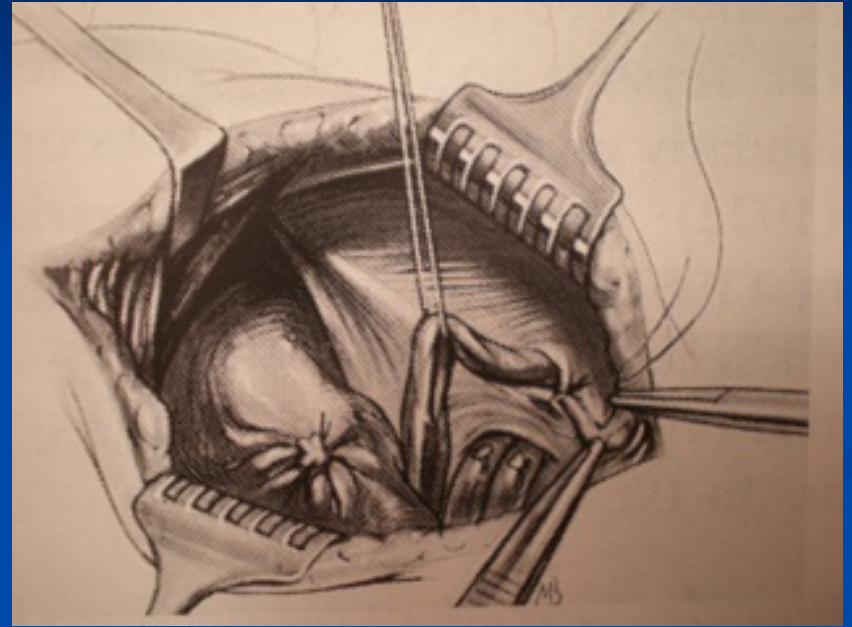
Coelioscopic surgery

The third way: posterior open, minimal
access, and minimal invasive approach

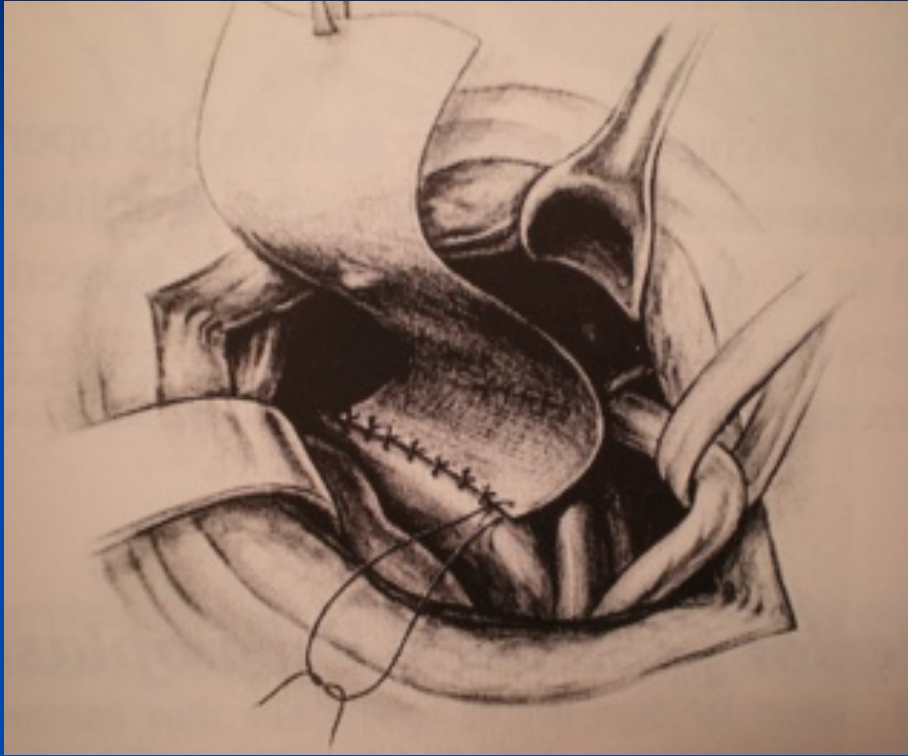
The Nyhus Preperitoneal Repair, 1955-1960



The Nyhus Preperitoneal Repair



The Nyhus Preperitoneal Repair





Henri R Fruchaud, 1956

Surgical Anatomie of groin hernia
Surgical treatment of groin hernia

The surgical treatment of inguinal or femoral hernias must not be the closure of the inguinal canal or the femoral ring, but the « deep reconstruction » of the abdominal wall in the whole groin region



JEAN Rives

1965



24
Plastie prothétique (d'après Rives) : vue en coupe sagittale de la région inguinale, prothèse en place.

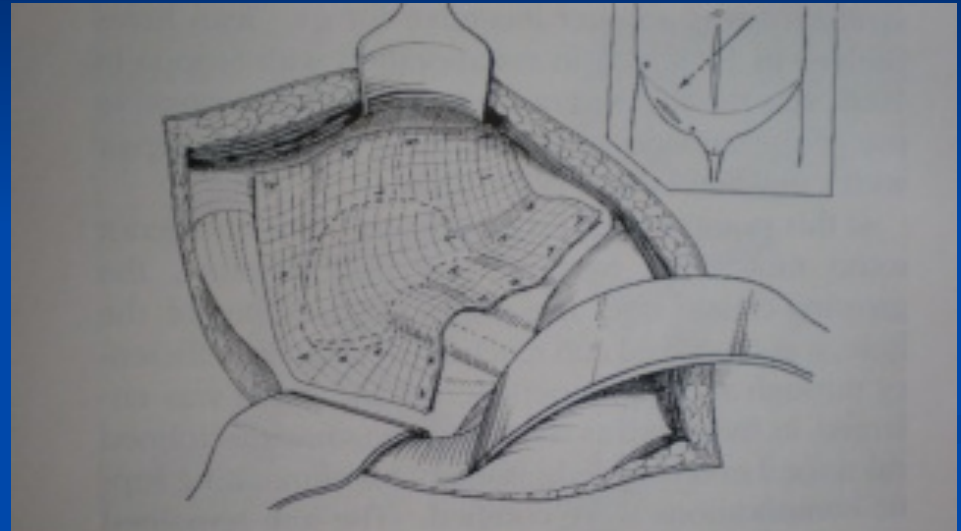
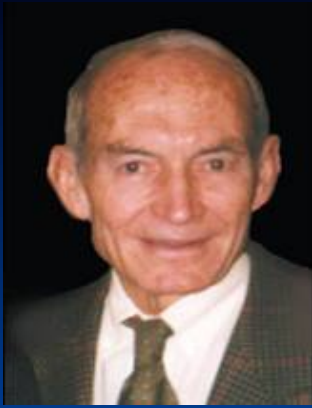
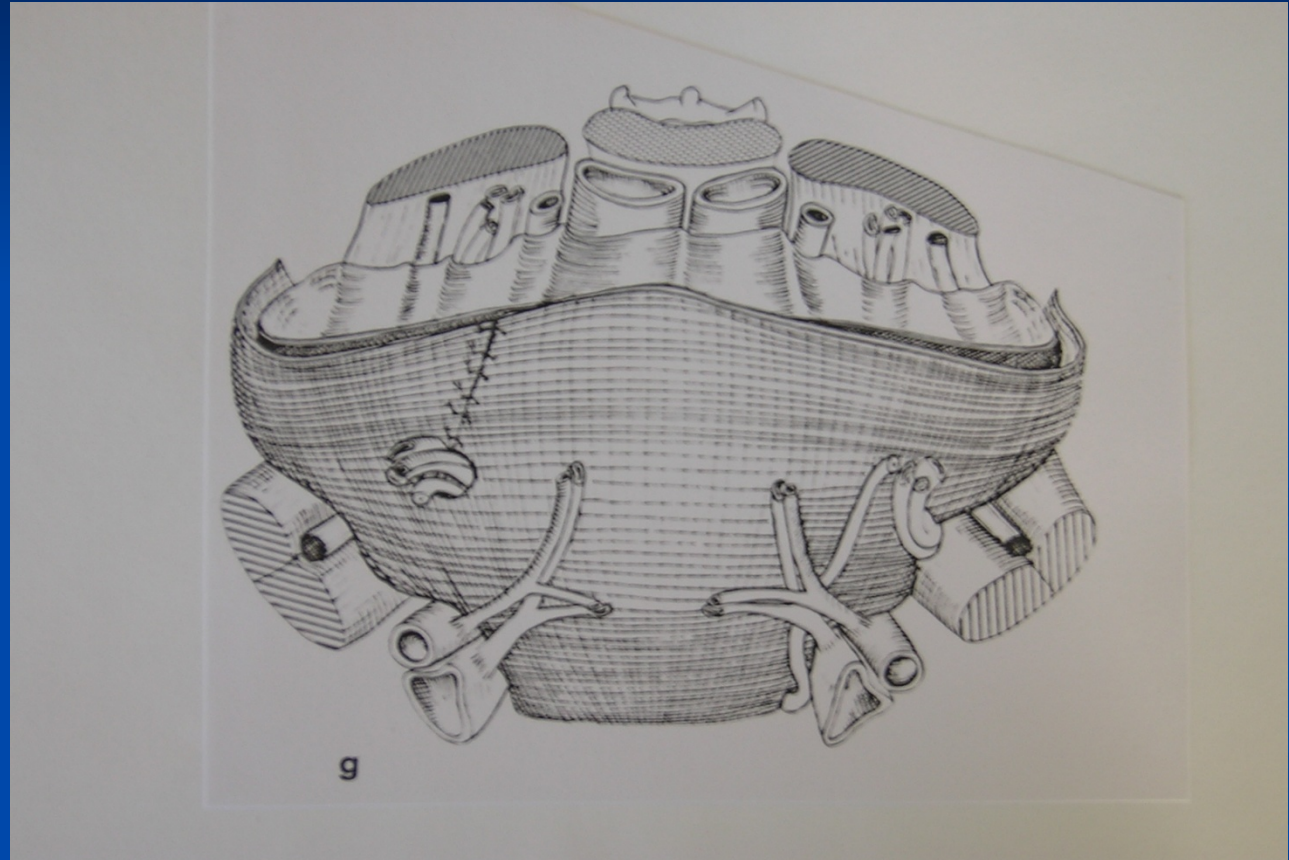


Figure III-98

Represents the placement of a unilateral prosthesis by the midline properitoneal route, proposed by J Rives (1965).
(Drawing courtesy of JB Flament, Reims, France.)



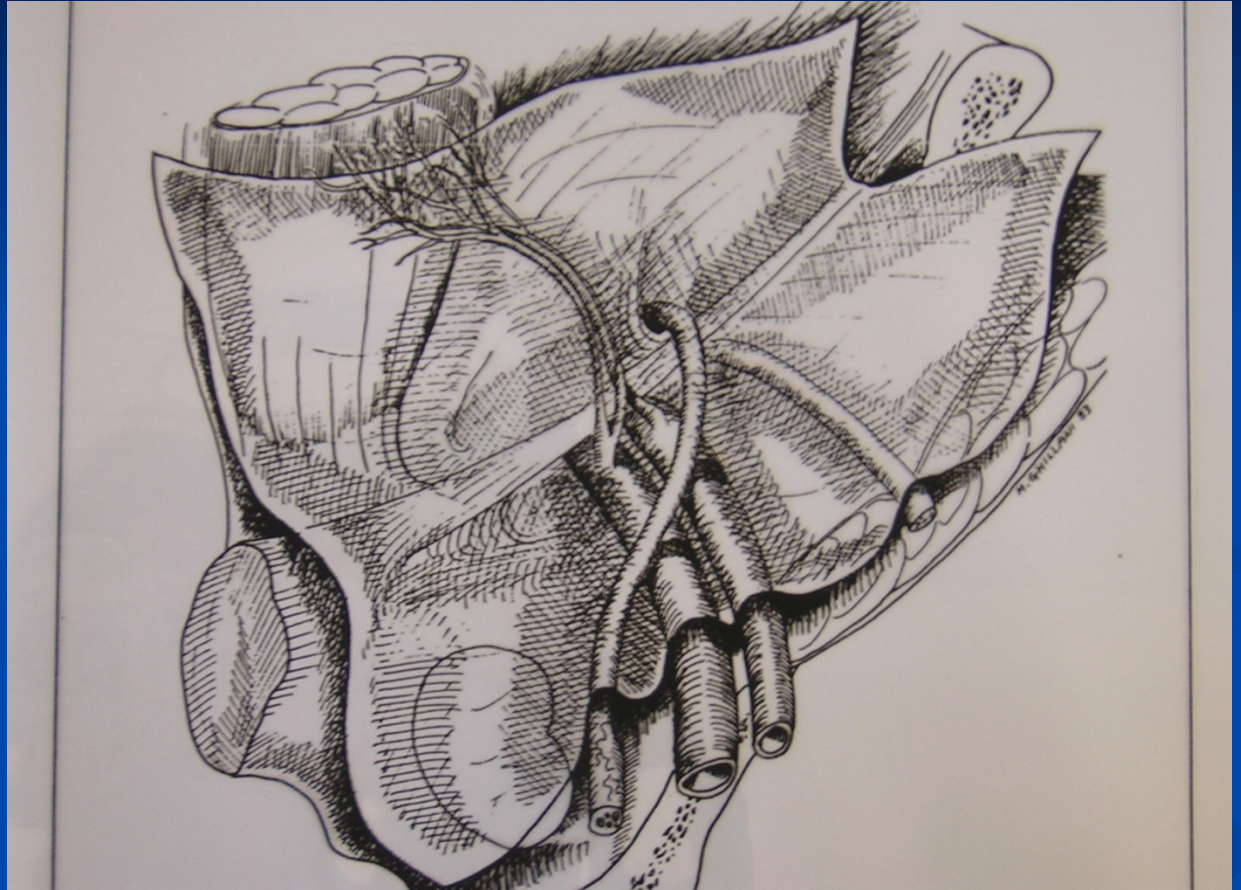
René Stoppa



Giant prosthetic reinforcement of the viscéral sac
1967: First tension free and sutureless hernia repair



GEORGES WANTZ



- Unilateral GPRVS for the treatment of complex hernias
- Ambulatory, local anesthesia

Laparoscopic hernia surgery 1992



Transperitoneal approach
J. Leroy, G. Fromont

Properitoneal approach
G. Begin, JL Dulucq



PROTHESES PROPERITONEALES NON FENDUES MISES PAR VOIE INGUINALE
AVEC PARIETALISATION DU CORDON ET LIGATURE DES
VAISSEAUX EPIGASTRIQUES INFERIEURS.

JH ALEXANDRE*, JL BOUILLOT

J.H. ALEXANDRE



1981

- INGUINAL APPROACH

-CORD PARIETALISATION

- M. P. O. OVERLAPPING

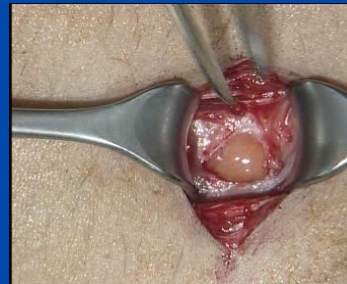
GREPA

Chirurgie de la paroi abdominale
Les prothèses synthétiques
Les colles biologiques

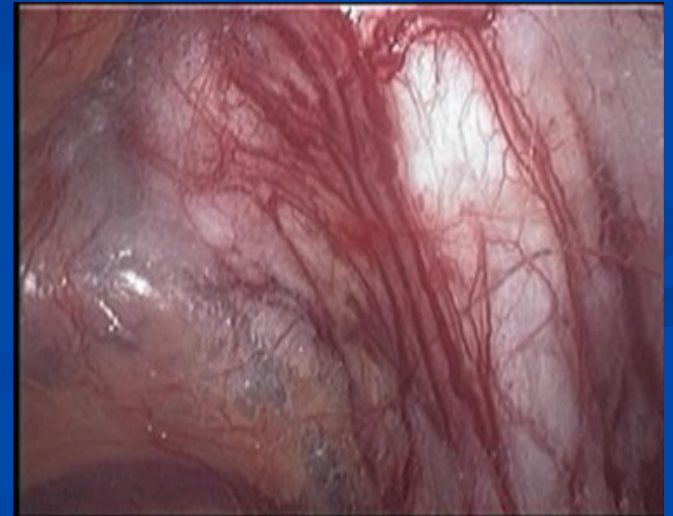
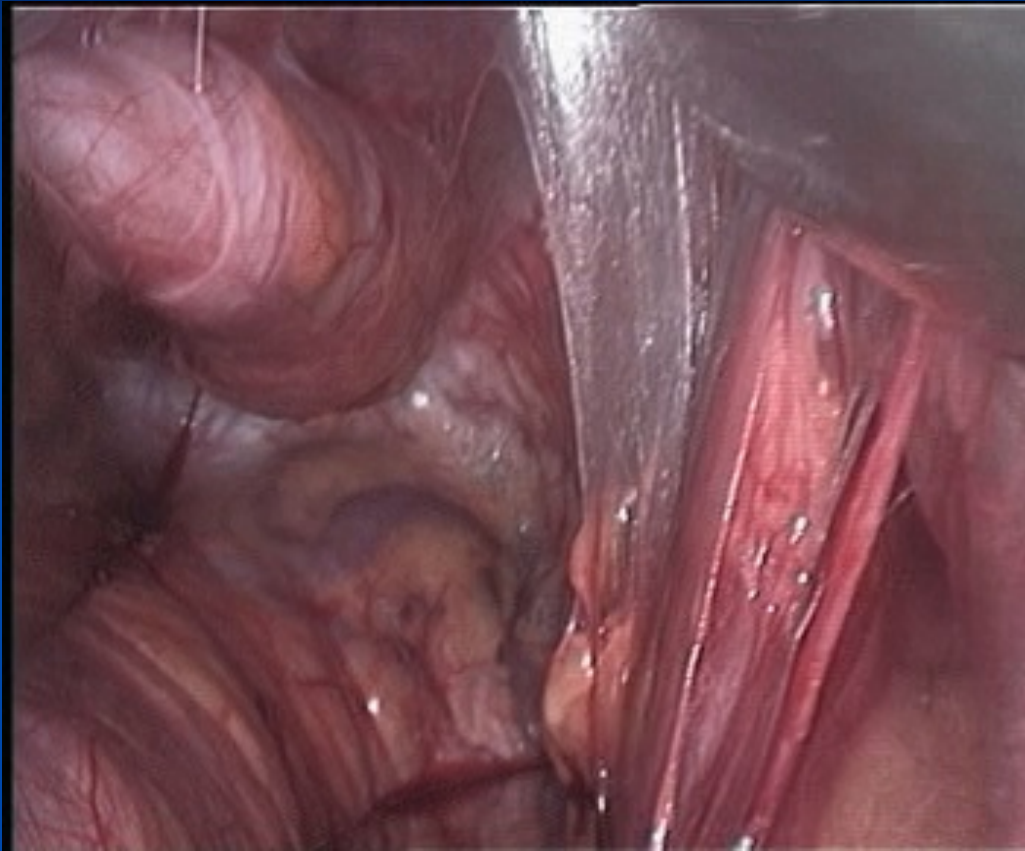
13^e année

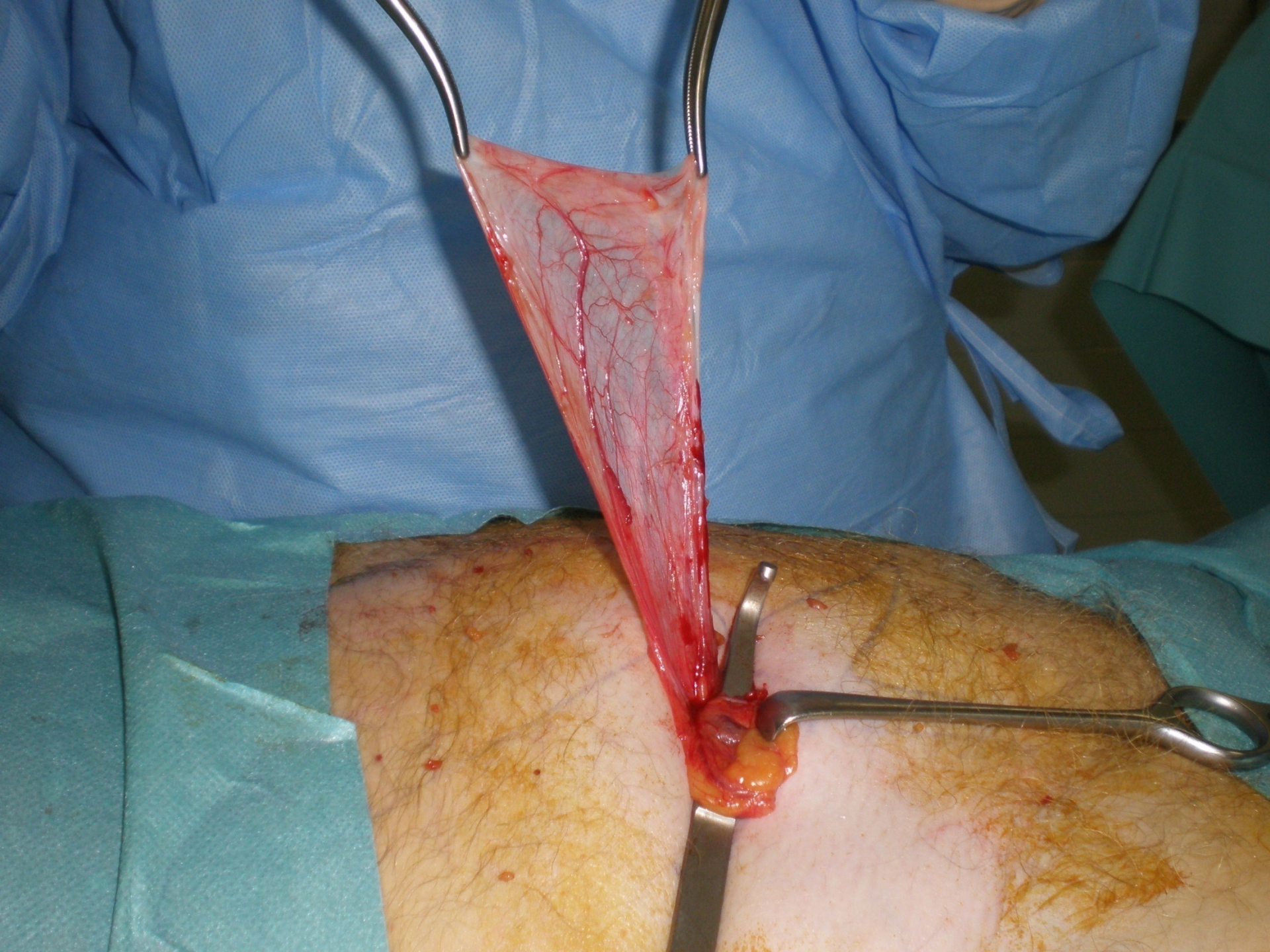
Bobigny
25 mai 1991

Franz Ugahary 1995

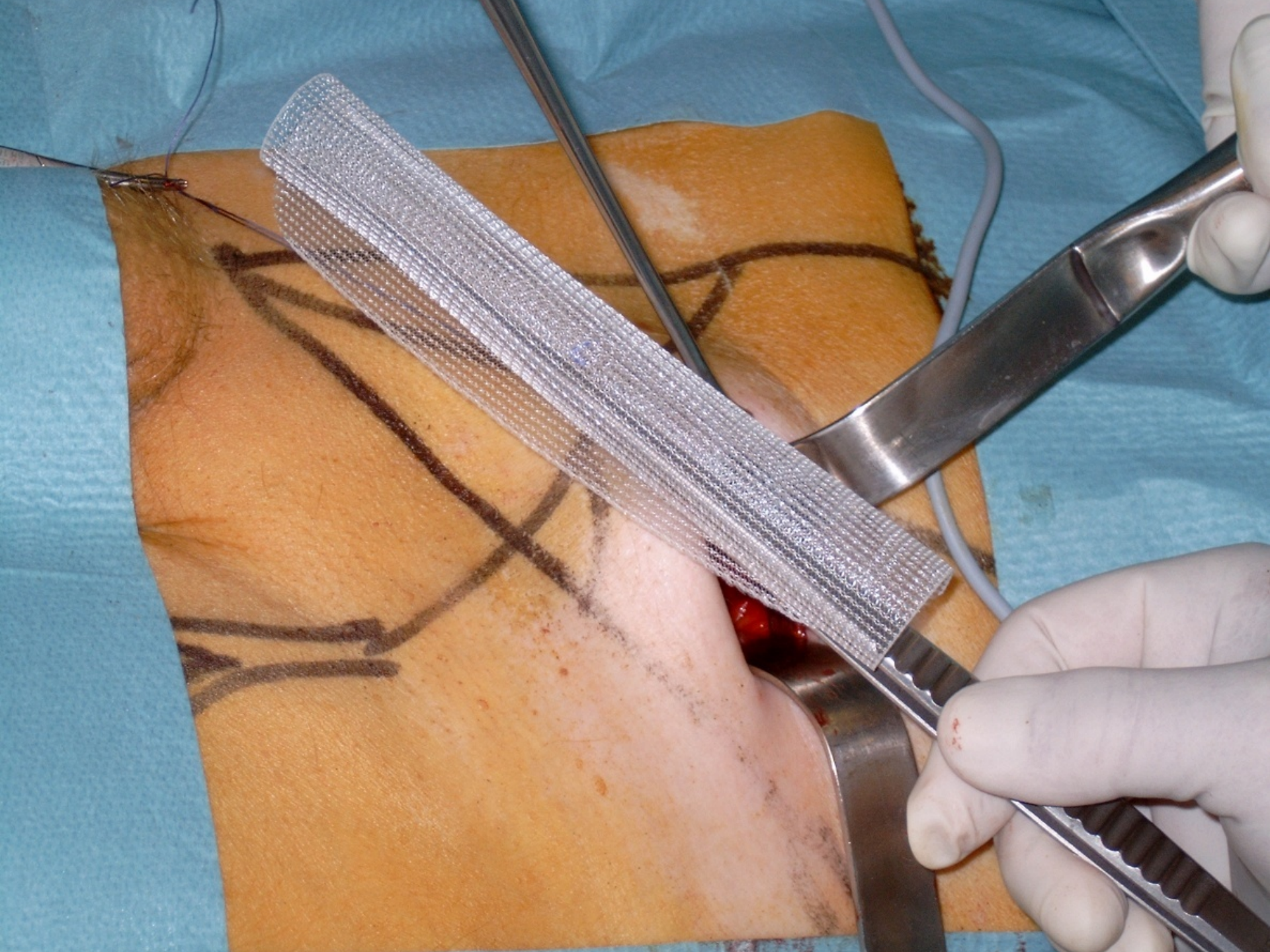


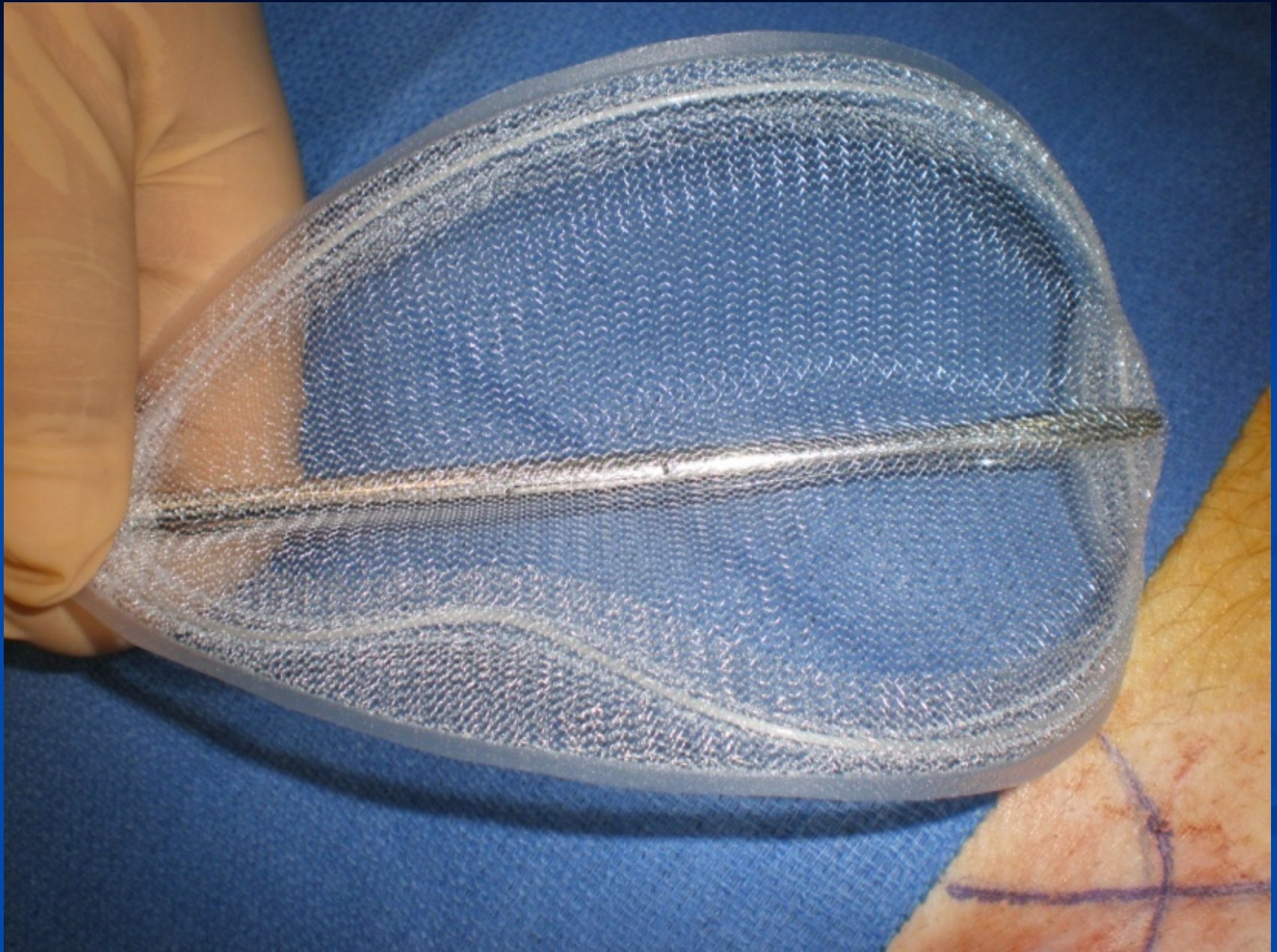
Preperitoneal cleavage inferior epigastric vessels - medial hernia - cord structures



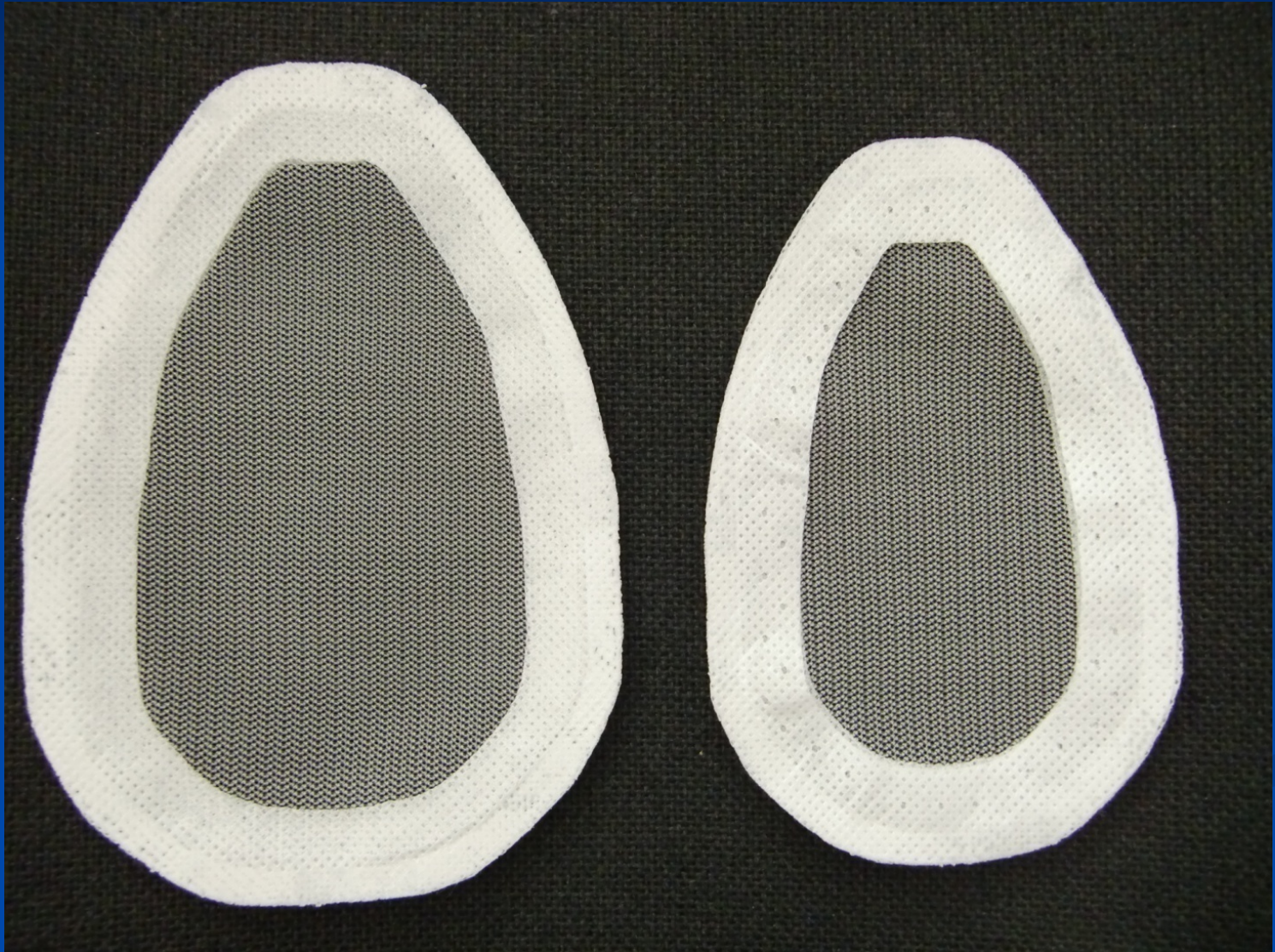


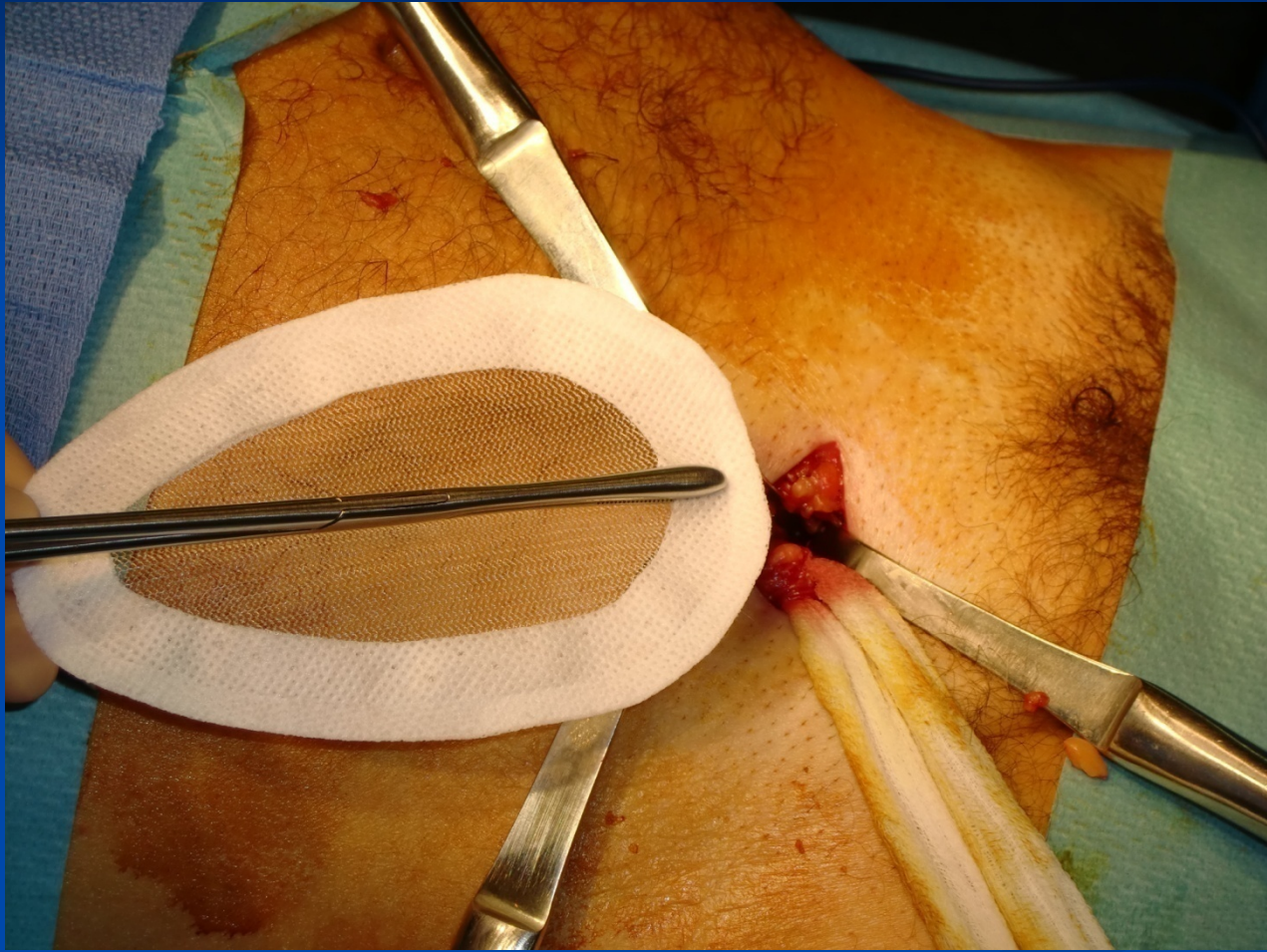






New prosthesis

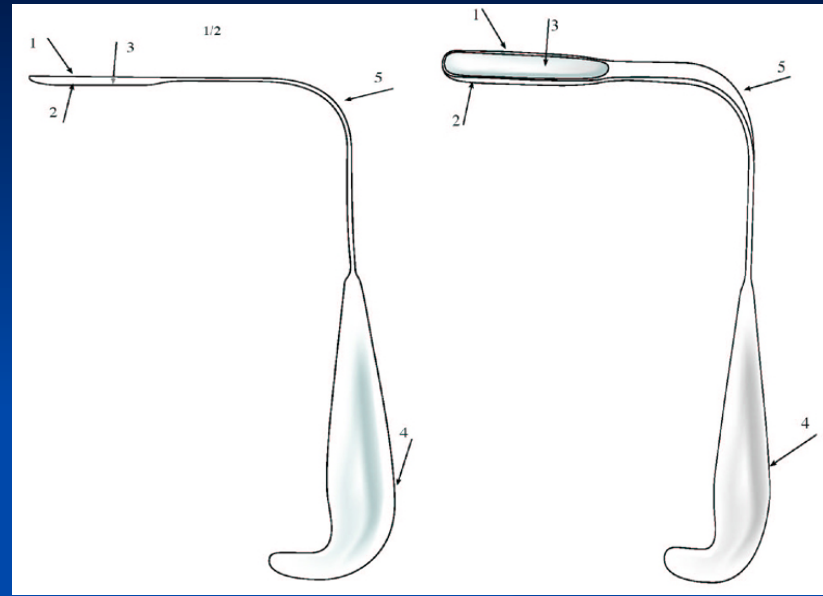




SPECIFIC MATERIAL



SPECIFIC MATERIAL



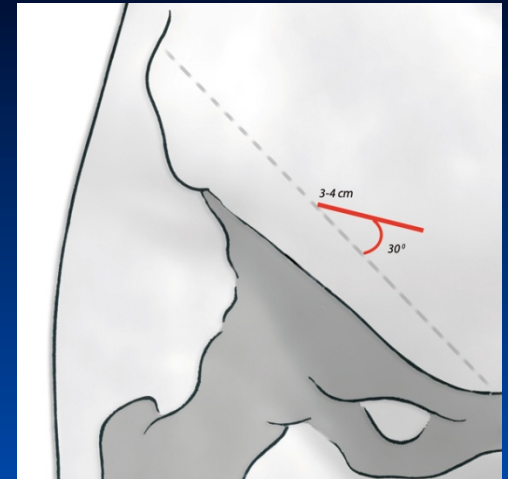
TIPP TECHNIQUE

E. Pélissier

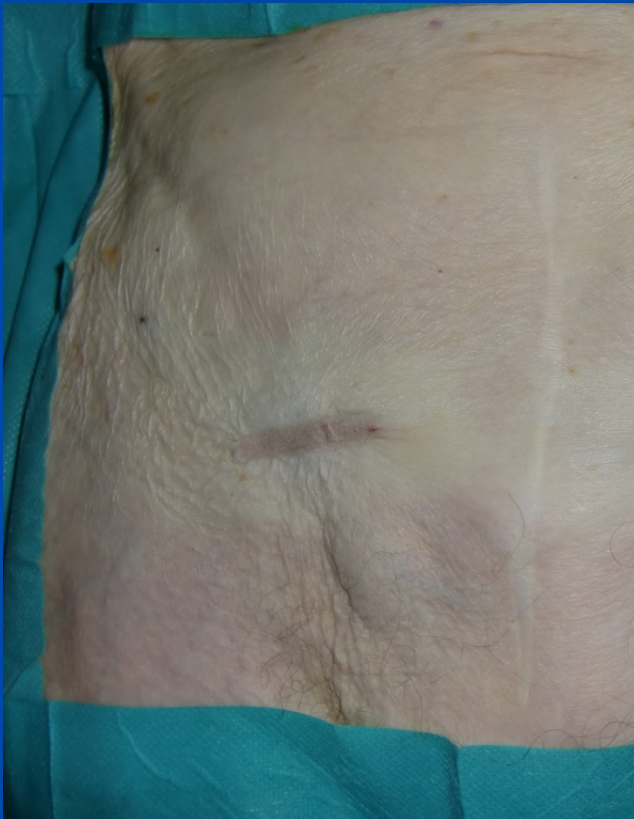
Hernia , 2006



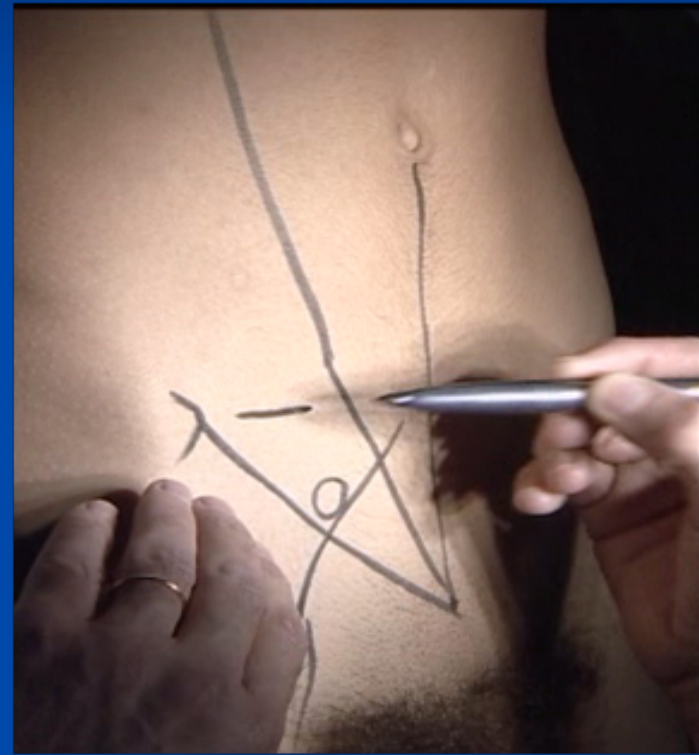
TIPP TECHNIQUE



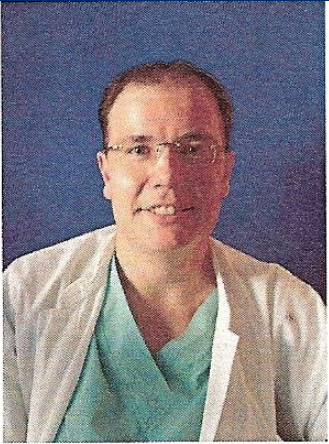
Berrevoet 2009



UGAHARY (Grid Iron)



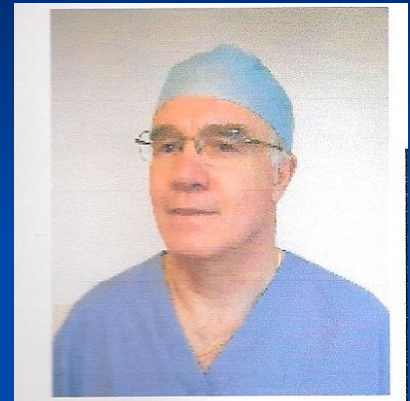
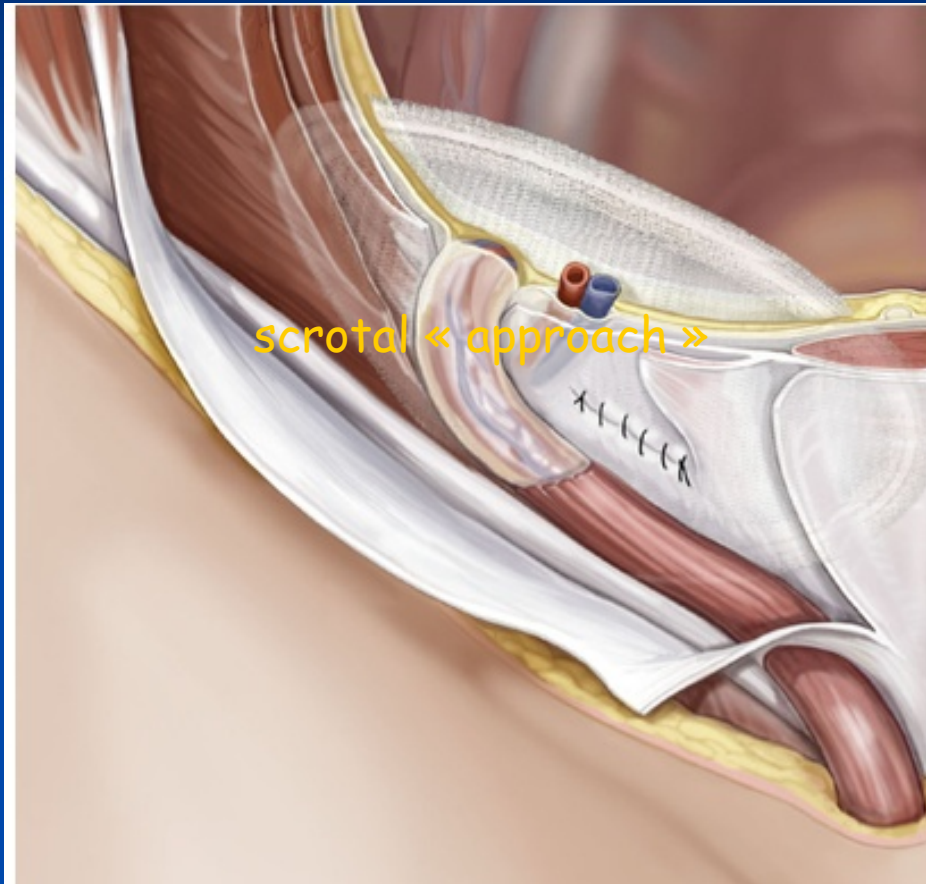
TIPP TECHNIQUE 2005



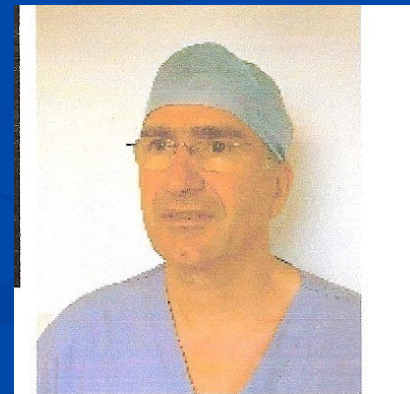
Dr. F. Berrevoet



Dr. S. De Gendt



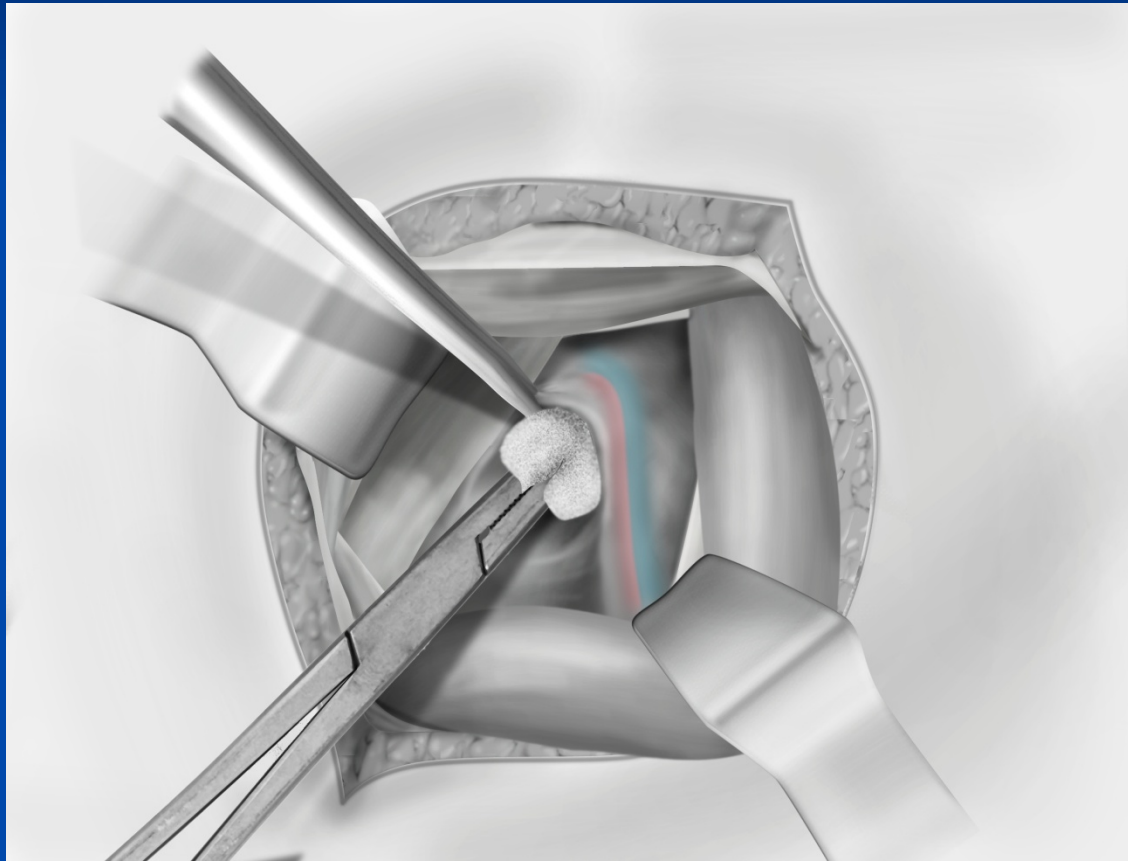
Dr. Jean Michel CHOLLET



Dr. Jean François GILLION

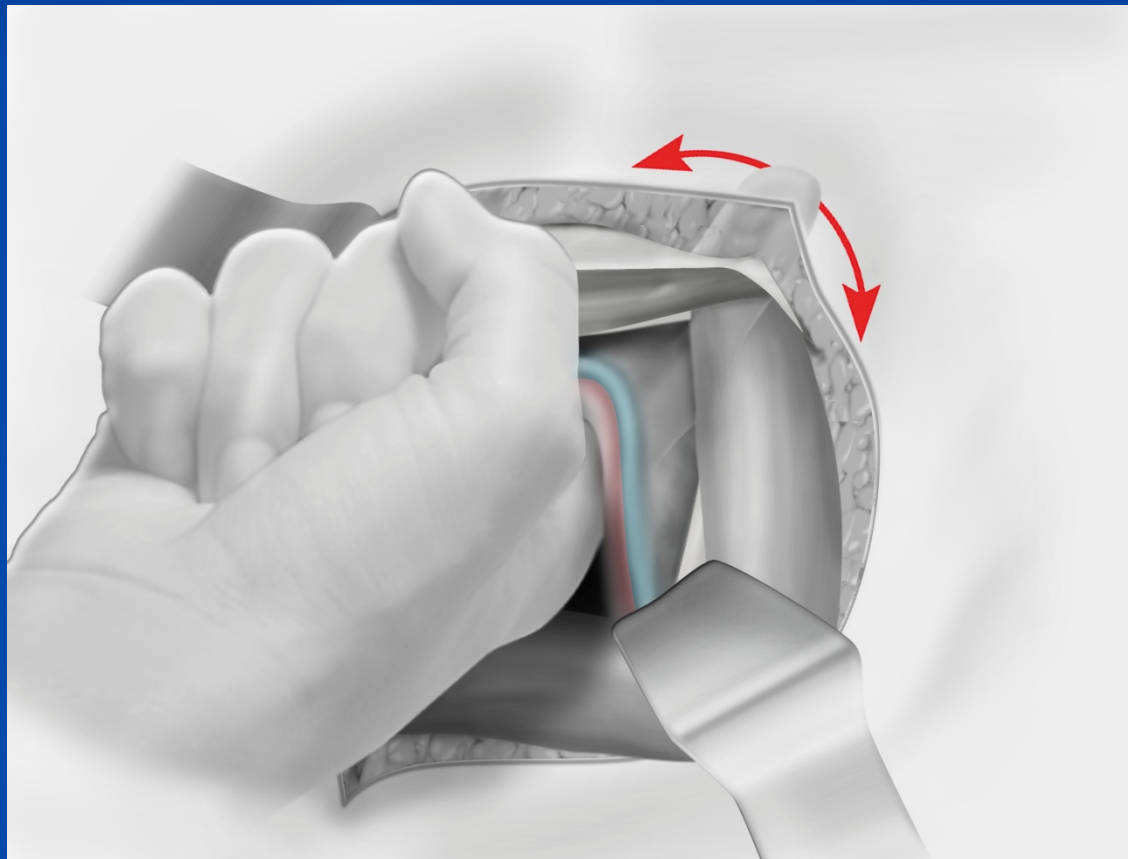
TIPP TECHNIQUE

J.F. Gillion



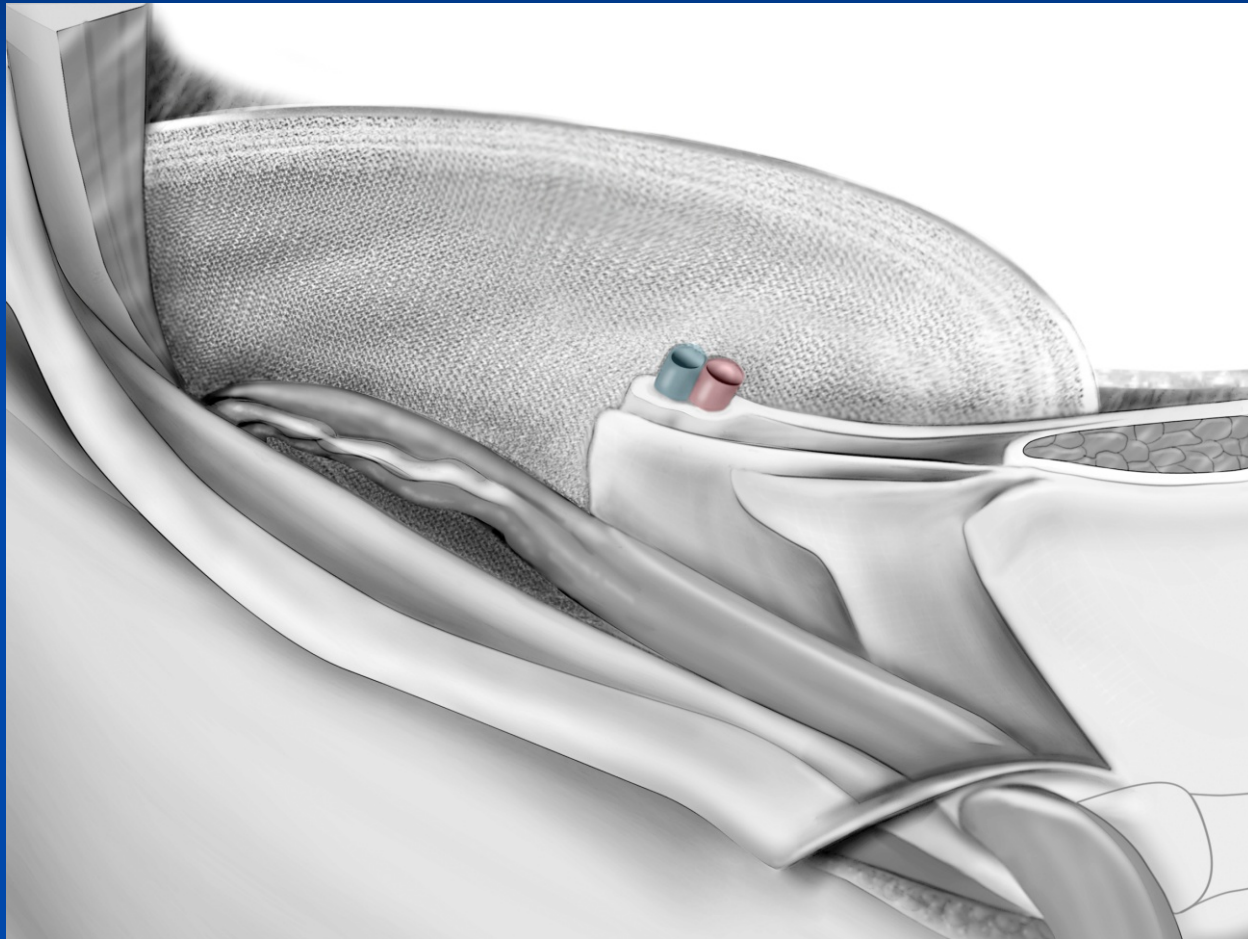
TIPP TECHNIQUE PREPERITONEALE DISSECTION PARIETALISATION

J.F. Gillion



TIPP TECHNIQUE

J.F. GILLION

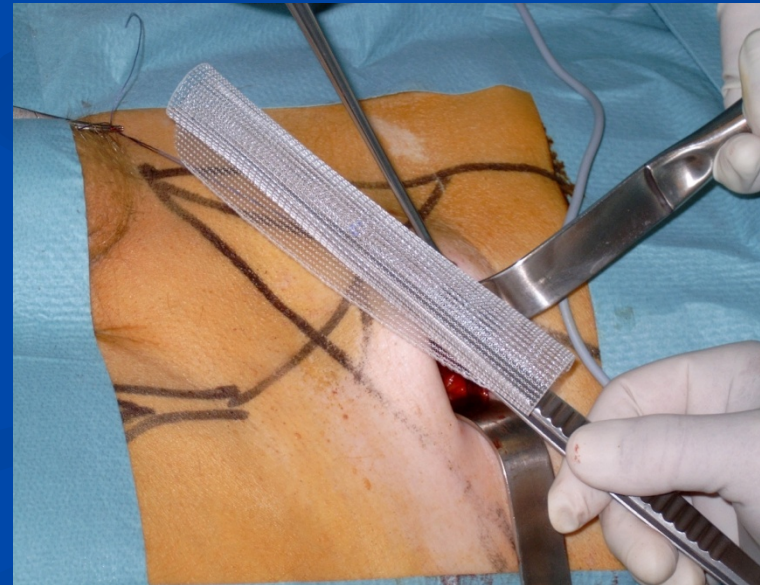


Marc Soler: Cagnes sur mer

From March 2001 To September 2011
N = 1575 (1358 patients)

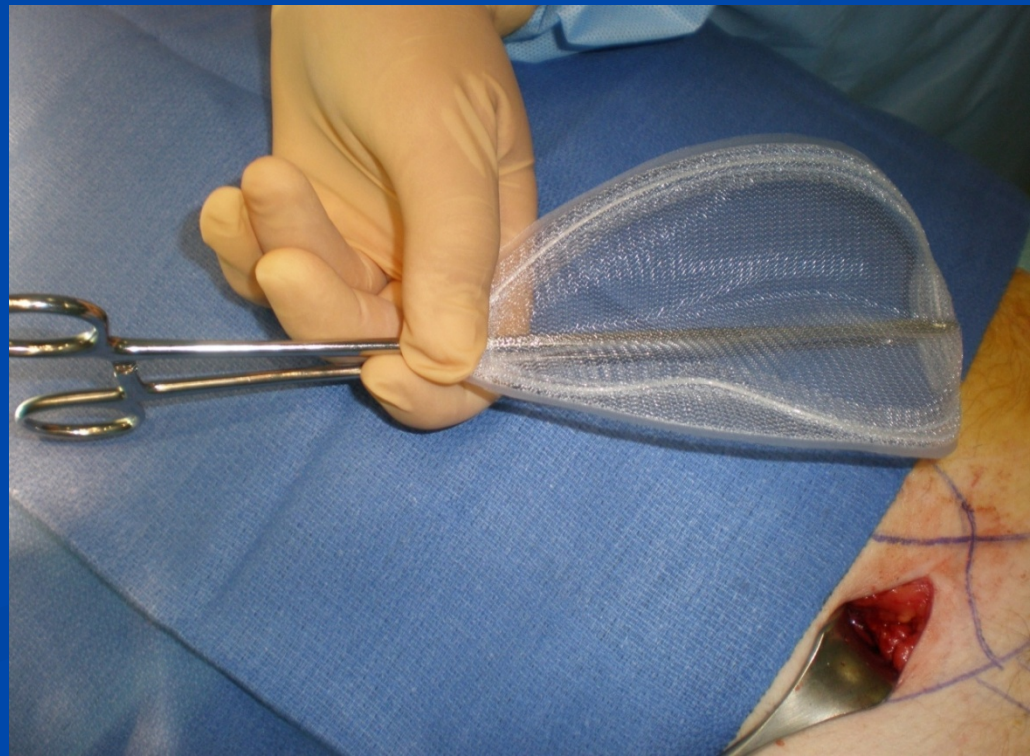
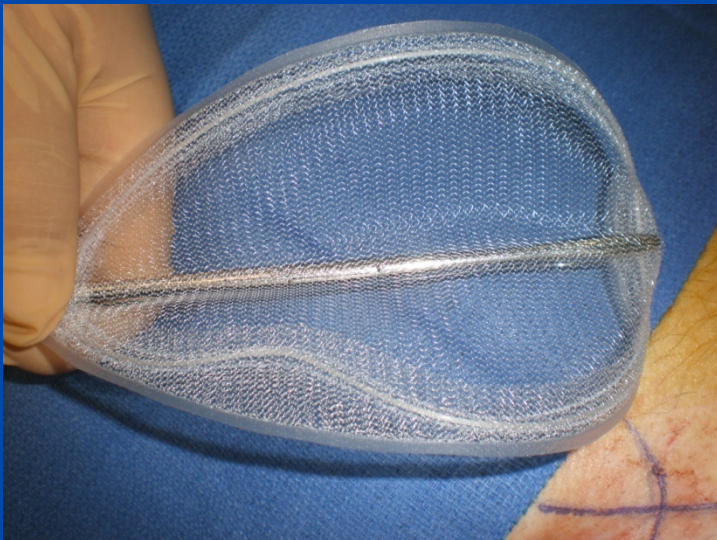
March 2001 TO february 2009:
-regular flat mesh, and Light weight
meshes: 1375 cases

UGAHARY (GRID IRON)

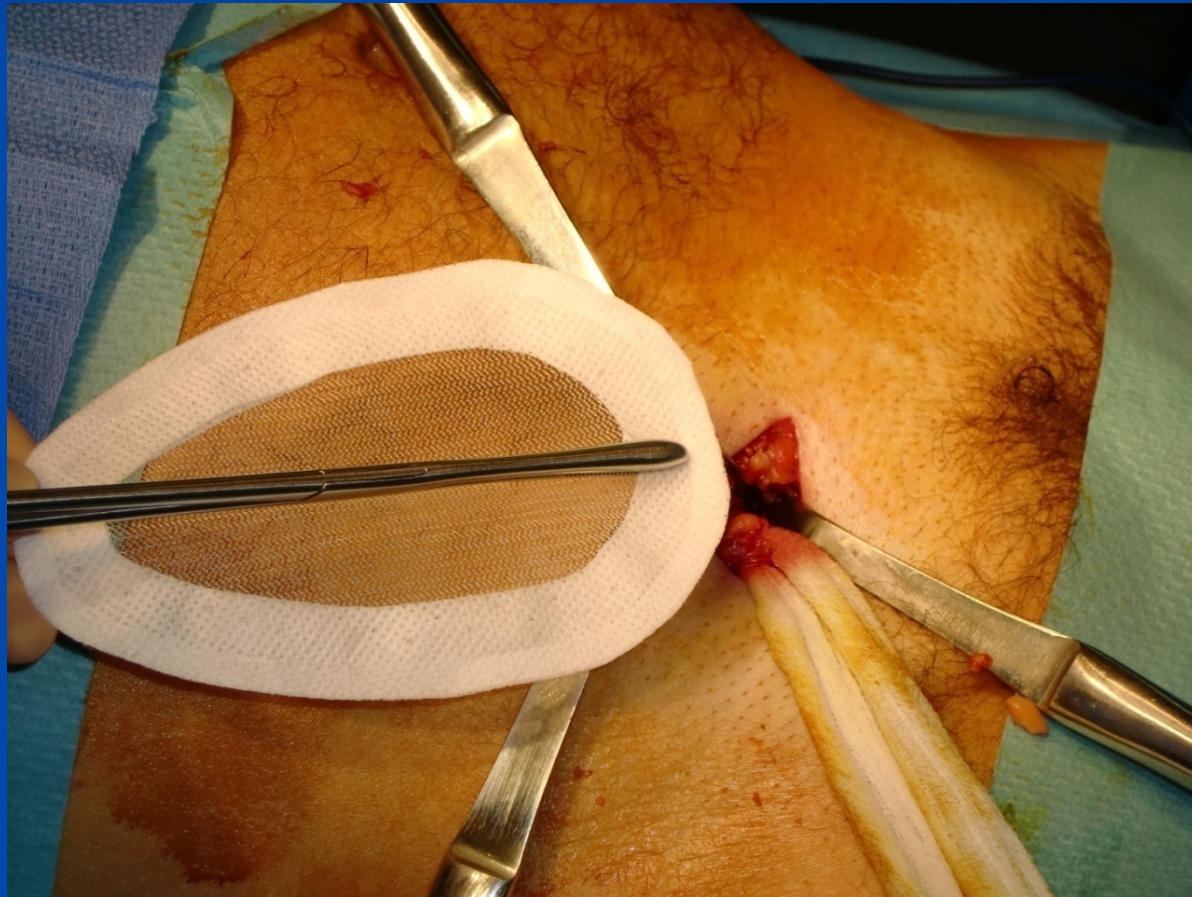


Marc Soler Cagnes sur mer

February 2009 TO September 2011: New
expandable mesh: 200 cases
(Ugahary technique, Grid Iron)



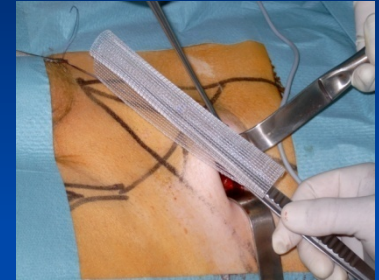
Marc Soler Cagnes sur Mer
SEPTEMBER 2011-MARCH 2012
TIPP TECHNIQUE AND GRID IRON
100 CASES
WITH THE NEW LESS RIGID MESH



Marc Soler: Cagnes sur mer

FIST 300 HERNIAS (263 PATIENTS) 2001 - 2004

- Mean follow up: 18 months
- Rate of follow up: 85%
- 223 MEN, 40 WOMEN
- PRIMARY: 284; SECONDARY: 16
- ANESTHESIA
 - GENERAL: 9 (3,4%)
 - SPINAL: 172 (63,4%)



ILIO INGUINAL BLOCK : 82 (32,2%)

e-mémoires de l'Académie Nationale de Chirurgie, 2004, 3 (3) : 28-33

Marc Soler: Cagnes sur mer

FIST 300 HERNIAS (263 PATIENTS) 2001 - 2004

■ HOSPITAL STAY

- DAY SURGERY: 128 (48,3%)
- Less than 48 hours: 123 (46,6%)
- More than 48 hours 14 (5%)



COMPLICATIONS

Haematoma: 12

Infection: 0

Marc Soler: Cagnes sur mer

FIST 300 HERNIAS (263 PATIENTS) 2001 - 2004

■ RECURRENCE: 7 (2,3%)

■ PAIN

Discomfort: N=8

Odd sensation: N=15

Severe Pain: 1 finish after 6 months



Marc Soler: Cagnes sur mer
NEW EXPANDABLE PROTHESIS
2009-2010

200 HERNIAS-183 PATIENTS

- MEANS FOLLOW UP: 18 months
- RATE OF FOLLOW UP: 87%
- 175 MEN, 8 WOMEN
- PRIMARY: 184; SECONDARY: 16
- ANESTHESIA
 - GENERAL: 0
 - SPINAL: 97(48,5%)
 - ILIO INGUINAL BLOCK: 103 (51,5%)



Marc Soler: Cagnes sur mer

NEW EXPANDABLE PROTHESIS

2009-2010

200 HERNIAS-183 PATIENTS

- HOSPITAL STAY:
 - DAY SURGERY 182 (91%)
 - ONE NIGHT OR MORE: 18 (9%)



COMPLICATIONS

Superficial haematoma or seroma: 9

Infection: 0

Bladder retention: 2

NEW EXPANDABLE PROTHESIS

2009-2010

200 HERNIAS-183 PATIENTS

- Recurrence N=2 (1%): small and asymptomatic

Discomfort

- Discomfort with normal activity: 23
- Difficulty with sport: 1

Moderate pain

- with normal activity: 3
- Difficulty with sport: 1
- Necessity to stop hard work: 1

Necessity to have pain killer: 0



NEW EXPANDABLE PROTHESIS

200 HERNIAS-183 PATIENTS

■ VA SCALE

■ VAS DURING DAILY ACTIVITY

■ VAS=0: 150	VAS=4: 3
■ VAS=1: 7	VAS=5: 3
■ VAS=2: 1	VAS=7: 1
■ VAS=3: 5	VAS=8: 1



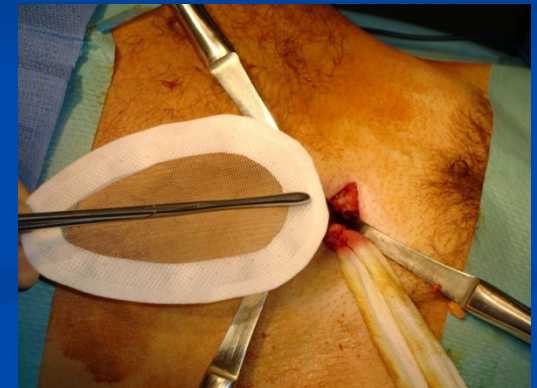
- For all the patient the pain is always less than the preoperative one

Marc Soler: Cagnes sur mer
NEW SEMI RIGID PROTHESIS
2011-2012

100 HERNIAS-91 PATIENTS

FOLLOW UP: 6 months

- **RATE OF FOLLOW UP: 100%**
- **92 MEN, 8 WOMEN**
- **PRIMARY: 92; SECONDARY: 8**
- **ANESTHESIA**
 - **GENERAL: with laryngeal mask without curarization: 42**
 - **SPINAL: 3**
 - **ILIO INGUINAL BLOCK: 55**



Marc Soler: Cagnes sur mer

NEW EXPANDABLE PROTHESIS

2011-2012

100 HERNIAS-92 PATIENTS

- HOSPITAL STAY:
 - DAY SURGERY 91 (91%)
 - ONE NIGHT OR MORE: 9 (9%)



COMPLICATIONS

Superficial haematoma or seroma: 4

Infection: 0

Bladder retention: 0

NEW EXPANDABLE PROTHESIS

2011-2012

100 HERNIAS-92 PATIENTS

- Recurrence N=0

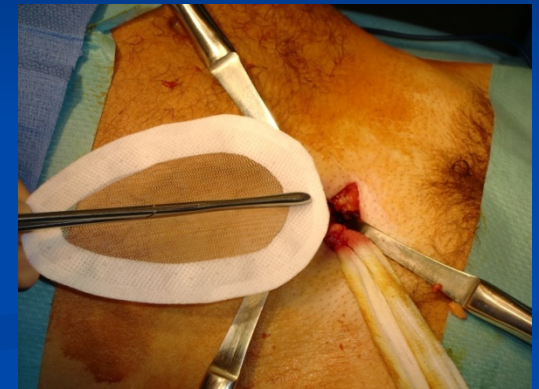
Discomfort

- Discomfort with normal activity: 12
- Difficulty with sport: 1

Moderate pain

- with normal activity: 1
- Difficulty with sport: 1
- Necessity to stop hard work: 1

Necessity to have pain killer: 0



NEW EXPANDABLE PROTHESIS 100 HERNIAS-92 PATIENTS

■ VA SCALE

■ VAS DURING DAILY ACTIVITY

■ VAS=0: 85

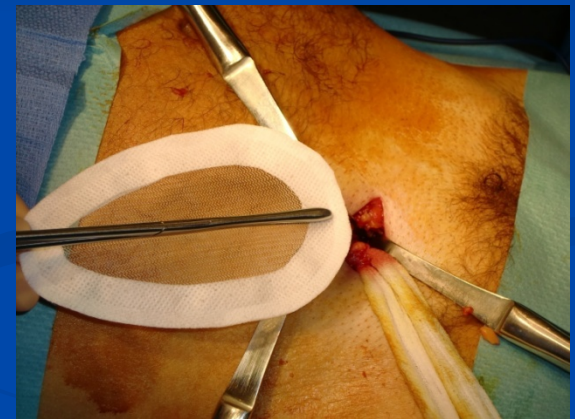
VAS=4: 1

■ VAS=1: 8

VAS=5: 2

■ VAS=2: 1

■ VAS=3: 2

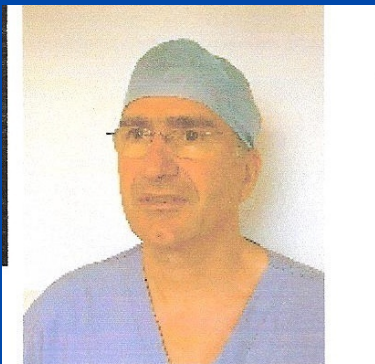


■ For all the patient, the pain is always less than the preoperative one

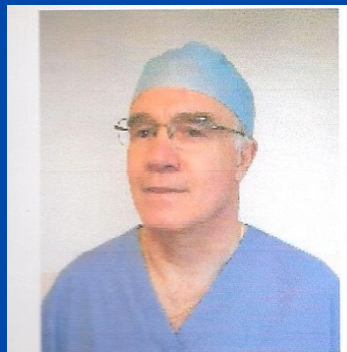
MOPP TECHNIQUE

Conclusion

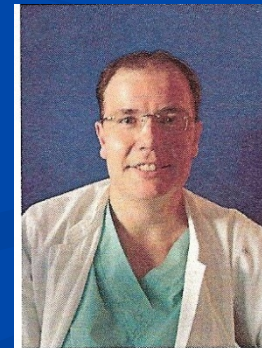
- UGAHARY (GRID IRON TECHNIQUE)
- TIPP (Trans Inguinale PrePeritoneale technique)



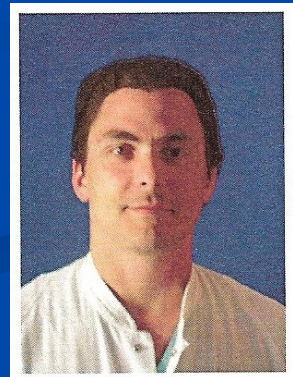
Dr. Jean François GILLION



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Dr. F. Berrevoet



Dr. S. De Gendt



MOPP TECHNIQUE Conclusion

- Total groin hernia repair primary & secondary hernia
- Minimal invasive
 - Minimal access
 - Local anesthesia, general anesthesia with tracheal mask without curarization
- Complication → no conversion



MOPP TECHNIQUE Conclusion

- Surgical Technique

No nerves dissection

No prosthesis on the contact of the nerves

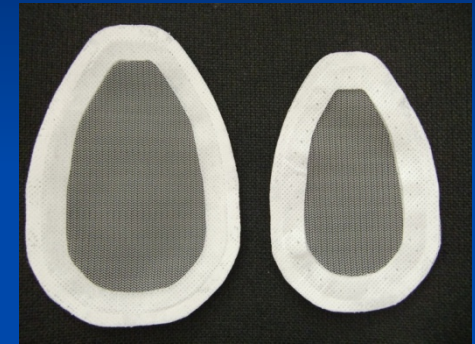
We never fix the prosthesis



MOPP TECHNIQUE Conclusion

The use of the new less rigid mesh

Make easier to unroll the prosthesis in the
Preperitoneal space.



PROSPECTIVE STUDY

- Post operative pain/ QOL
- recurrence rate

