

Traumatic lumbar hernia

Laparoscopic approach

Post-graduate-course Belgian Section for Abdominal Wall Surgery
Monday, 7th December 2015

Dr Morgan Vandermeulen
Pr Olivier Detry

Dpt of Abdominal Surgery & Transplantation
CHU Liege, University of Liege



Lumbar Hernia

- Definition

Extrusion of intra- or extra-peritoneal content through a defect in the posterolateral abdominal wall

- Congenital or acquired (80%)

Lumbar Hernia

- **Definition**

Extrusion of intra- or extra-peritoneal content through a defect in the posterolateral abdominal wall

- **Congenital or acquired (80%)**

- Primary vs secondary (25%)

Lumbar Hernia

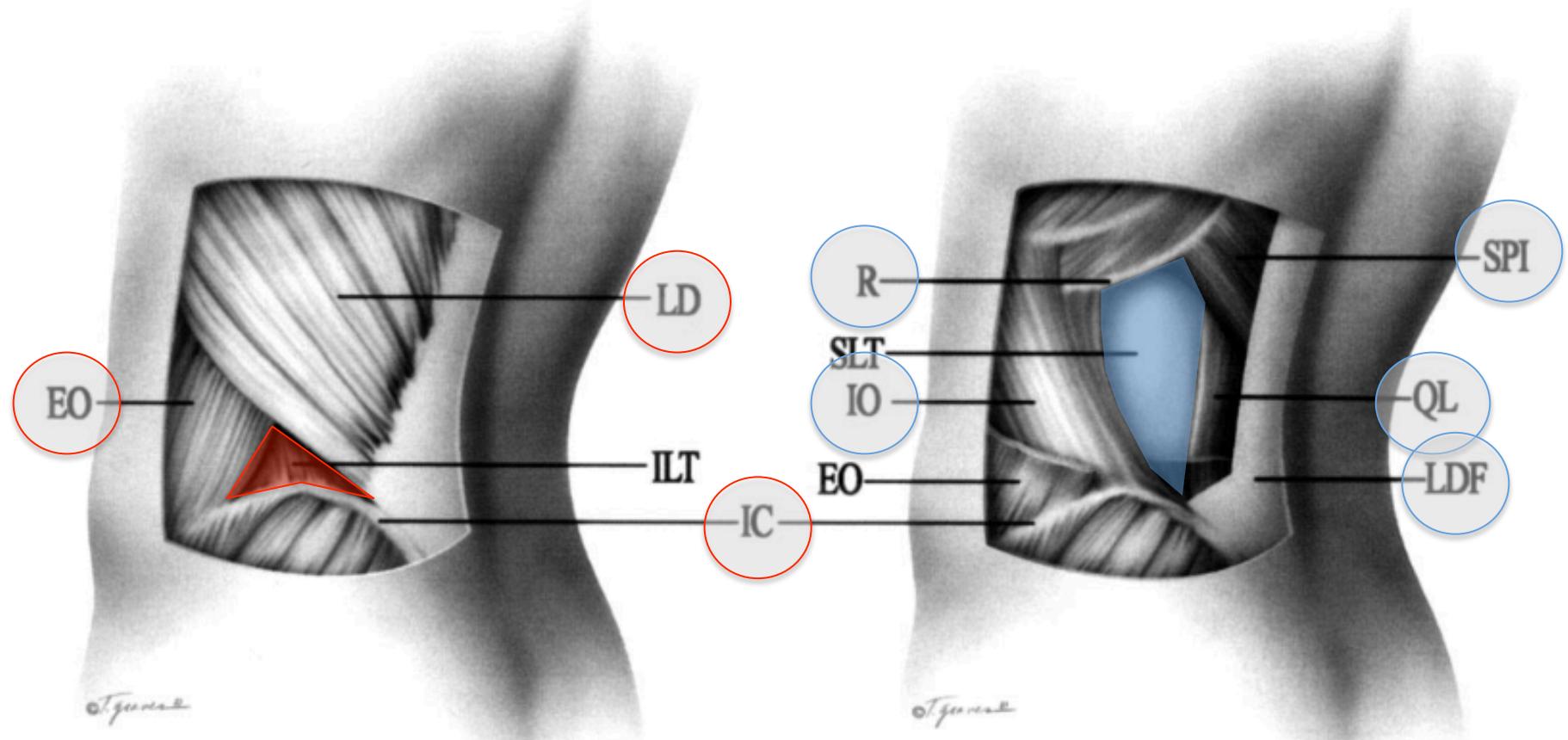
- **Definition**

Extrusion of intra- or extra-peritoneal content through a defect in the posterolateral abdominal wall

- **Congenital or acquired (80%)**

- Primary vs secondary (25%)

- Trauma
- lumbar abscess
- prior surgical procedure



Triangle of PETIT

Triangle of Grynfeltt

Burt, J Trauma. 2004;57:1363

Traumatic Lumbar Hernia (TLH)

- Rare clinical entity
- First described in 1906
- Mechanism:
 - Blunt trauma (motor vehicle collisions +++)
 - Local tangential shearing forces combined with an acute increase in intra-abdominal pressure
- ILT > SLT > « diffuse type »

Traumatic Lumbar Hernia (TLH)

- Diagnosis is difficult
 - Associated injuries → TLH often not suspected initially
 - Signs and symptoms
 - Flank pain and hematoma
 - Palpable reducible mass with pain and bruising
 - Sometimes later in the postinjury period
- May lead to
 - Remaining pain, inconfort
 - Increase in the size
 - Strangulated hernia
- **Computed tomography +++**

Traumatic Lumbar Hernia (TLH) Management

- Surgery
- No consensus
- Timing: early vs delayed
- Approach: mesch
 - Open
 - Laparoscopic
- Recurrence? (location, size, comorbidities)
- Individualized management

Case Report

- Man, 28 years old, no medical history
- 6-meter-high fall
- Conscious, hemodynamically stable
- Right wrist and lumbar region pains
- Examination: wrist deformation, painful right flank hematoma
- Rx: Broken wrist

Case Report

- CT imaging : TLH (**initially missed**)

And then...

(5 months after trauma)

- Remaining right lumbar pain
- large swelling on the right flank majored during a Valsalva
- CT imaging

A177

27/05/2015

14:21:22

14:22:48



P177

Non \Contrast
Non \Contrast



S1322

27/05/2015

14:24:09

14:24:11

R
2
3
9

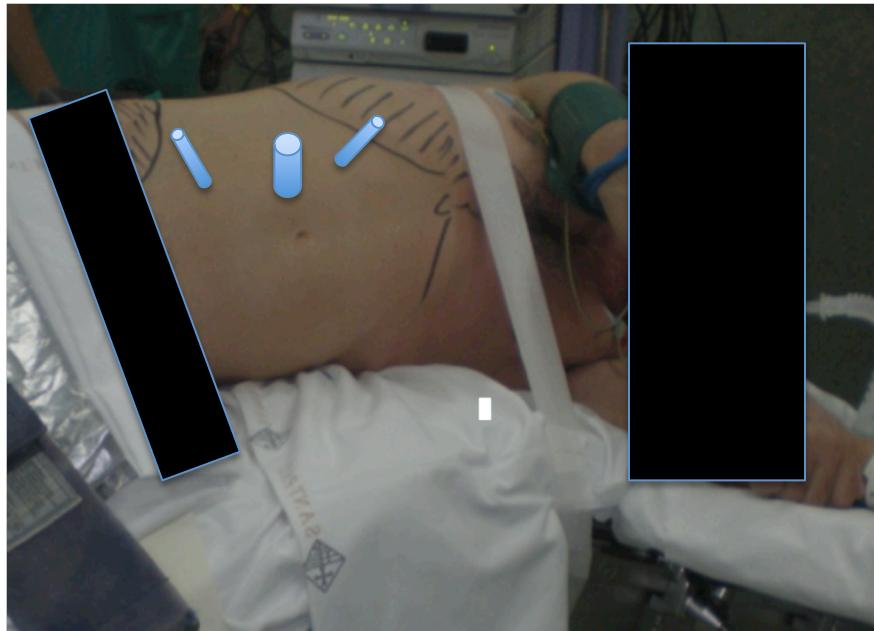
L
2
5
4

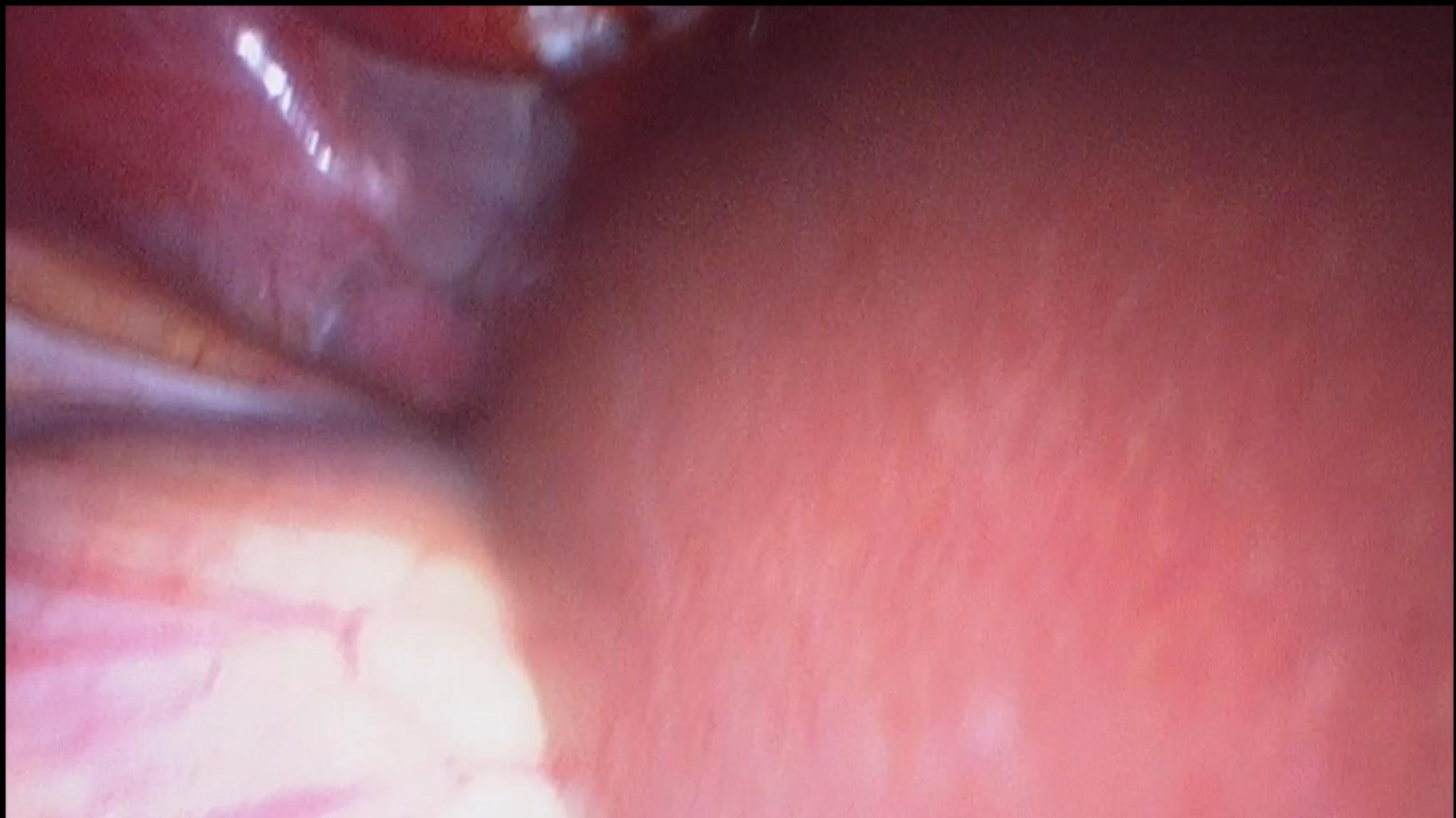
S1329

Non\Contrast\Coronal
Non\Contrast\Coronal

Traumatic Lumbar Hernia (TLH)

- Operative procedure 8 months after the trauma with a laparoscopic approach





Post-operative period

- Postoperative period marqued by right flank pain and dysesthesia in lateral area of the thigh. Discharged home 3 days later.
- +3 months:
 - No pain, no dysesthesia
 - Clinically excellent results.
 - CT scanner

A207

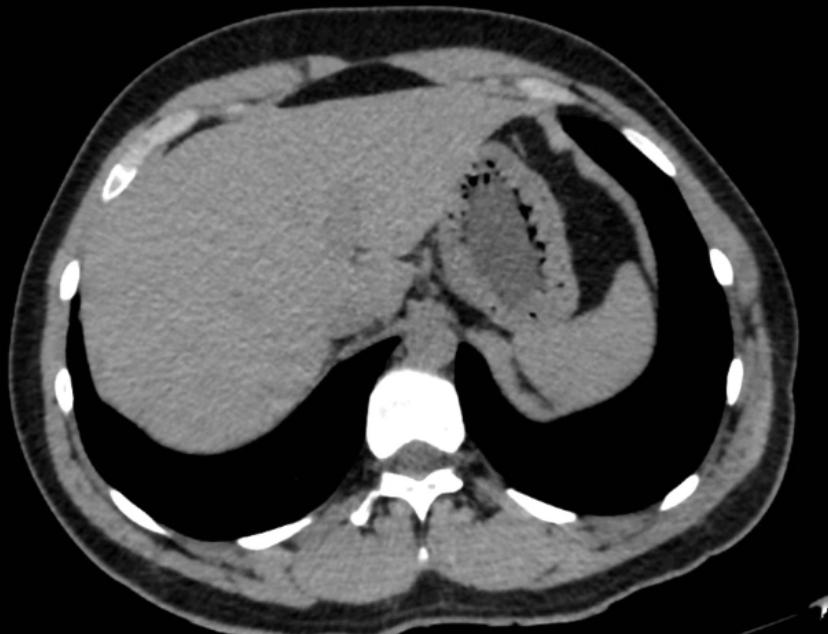
24/09/2015

09:30:32

09:31:11

R
1
8
4

L
2
3
0



P207

Thank you!