

Its just a hernia !

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Its just a hernia !

- Sportsman's hernia
- Laparoscopic versus open hernia repair
- ACC and Inguinal hernia cover

Sportsman's hernia

Gilmore's hernia

Incipient hernia

Athletic Pubalgia

Soccer player groin

Sportsman's groin

Hockey groin syndrome

'Treatment of the Sportsman's groin':
British Hernia Society's 2014 position statement
based on the Manchester Consensus Conference

Br J Sports Med 2014;**48**:1079–1087.

Inguinal disruption

Inguinal disruption

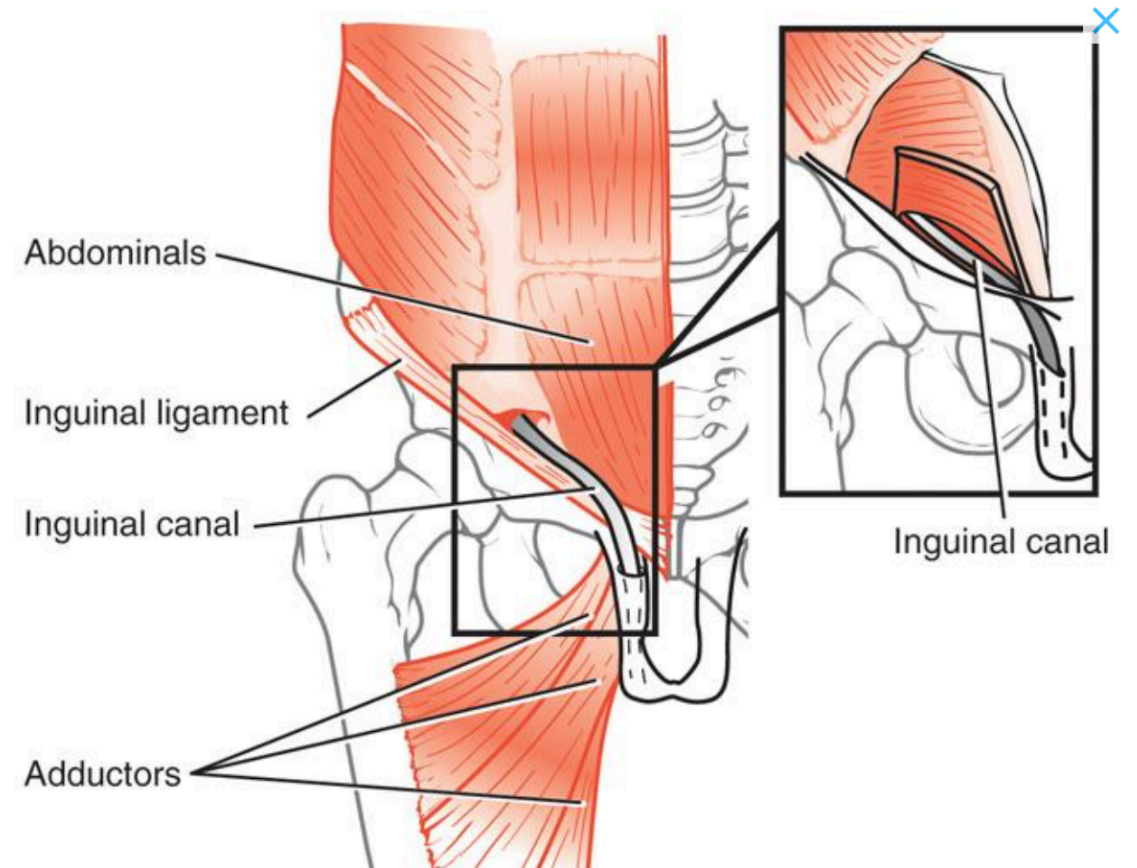
No actual hernia !!!

The pain typically after sports activity, gets better with rest, returns with sports activity

Abnormal increased tension in the inguinal canal

1. Posterior wall weakness
2. Conjoint tendon damage
3. Tears in the inguinal ligament

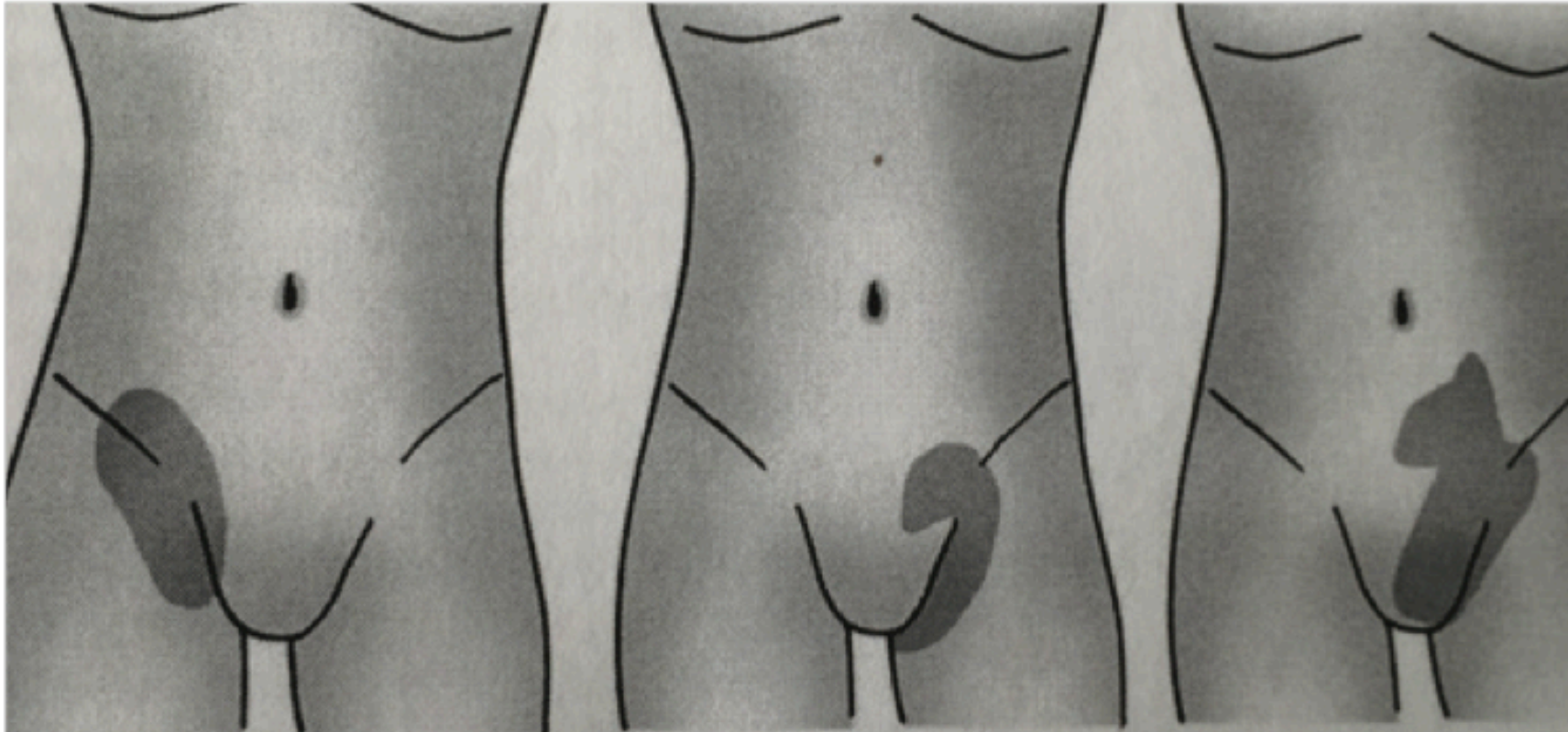
Generally above the inguinal ligament



Inguinal disruption: Differential diagnosis

- Acetabular injury
- Pubic ramus fractures
- Osteitis pubis
- Pubic Symphysitis
- Hip pathology

Inguinal disruption: Pain zones



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Pinpoint tenderness over the pubic tubercle

Tenderness on the deep inguinal ring

Tenderness on superficial inguinal ring

Pain at the origin of adductor longus tendon

Diffuse dull pain in the groin, radiating to the perineum and inner thigh

Inguinal disruption: Investigations

- *Ultrasound* of the inguinal canal
- *MRI pelvis* to exclude other pathology

Inguinal disruption: Is surgery always advised?

Algorithm for the management of inguinal disruption

Time	Discomfort	Treatment
1–2 months	ID VAS 0–2 at rest; 6–7 on exercise; cannot undertake any sporting activity	Prehabilitation, rest and analgesia (see box 1)
>2 months	On going ID —chronic groin pain—failure of rehabilitation	Surgical repair either open or laparoscopic with postoperation rehabilitation (see table 1)

VAS, visual analogue scale.

Is surgery effective?

Surgery. 2011 Jul;150(1):99-107. doi: 10.1016/j.surg.2011.02.016. Epub 2011 May 5.

Laparoscopic surgery for chronic groin pain in athletes is more effective than nonoperative treatment: a randomized clinical trial with magnetic resonance imaging of 60 patients with sportsman's hernia (athletic pubalgia).

Paajanen H¹, Brinck T, Hermunen H, Airo I.

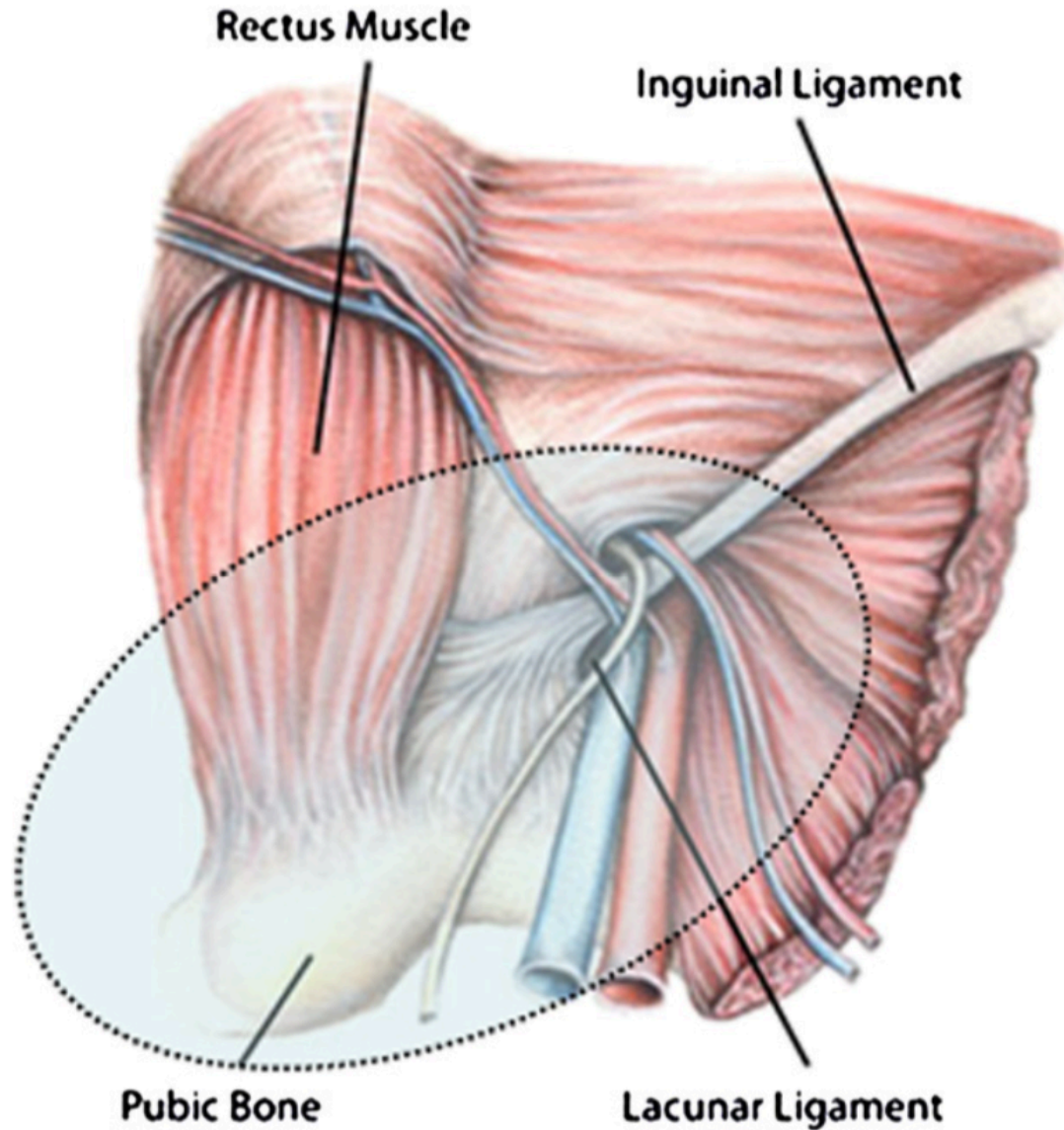
Randomised into Operative (n=30) or physiotherapy group (n=30)

Operative repair was more effective to decrease chronic groin pain after 1 month and up to 12 months of follow-up ($P < 0.001$).

90% in the operative group returned to sports activities vs. 27% in the nonoperative group.

Laparoscopic mesh reinforcement was more efficient than conservative therapy

Laparoscopic mesh reinforcement



Inguinal hernia

Laparoscopic or open surgery ?

Laparoscopic compared with open methods of groin hernia repair: systematic review of randomized controlled trials

EU Hernia Trialists Collaboration

- 34 RCT's including 6804 patients
- Duration of operation: Longer in the laparoscopic group
- Visceral and Vascular injuries more frequent in the Laparoscopic group 4.7% per 1000
- Postoperative pain: lower in the laparoscopic group
- Length of hospital stay similar in both groups
- Recurrence rates similar both groups
- Chronic groin pain and numbness are significantly reduced by Laparoscopic approach

Concomitant femoral and inguinal hernias

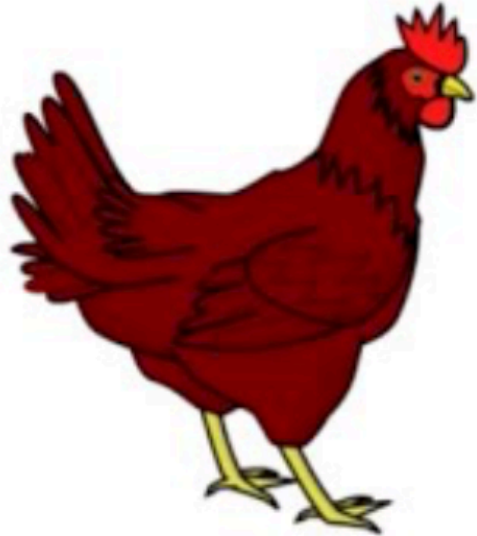
- 11% of laparoscopic inguinal hernia repairs have concomitant femoral hernias
- 51% of Femoral hernia repair patients have concomitant Inguinal hernias

ACC and Inguinal Hernia

Does a single strenuous event cause a inguinal hernia?

Does a single strenuous event cause a inguinal hernia?

WHICH CAME FIRST



Strenuous event !

**OR
THE**



Inguinal hernia !

Single strenuous event: Does it predispose to inguinal herniation?

P. Sanjay · A. Woodward

520 hernia repair patients sent questionnaires. 62% (320) response rate.

51% of the hernias were gradual in onset and in 42% of hernias there was a association between a strenuous event and sudden onset of hernia.

91% of patients reported groin pain at the time of the event

74% of patients had indirect hernias in the sudden onset group.



Other studies

- *Smith GD, Crosby DL, Lewis PA (1996) Inguinal hernia and a single strenuous event. Ann R Coll Surg Engl 78(4):367–368*
- *Pathak S, Poston GJ (2006) It is highly unlikely that the development of an abdominal wall hernia can be attributable to a single strenuous event. Ann R Coll Surg Engl 88(2):168–171*
- *Hendry PO, Paterson-Brown S, de Beaux A (2008) Work related aspects of inguinal hernia: a literature review. Surgeon.6(6):361–365*

ACC and RACS consensus statement 2016

- The patient reports that a single strenuous event has caused the hernia
- Significant groin pain at the time of the event, enough to cease activity
- On examination: Groin lump
- Diagnosis is made within 10 days of the strenuous event
- If strenuous event occurred at work, incident officially reported to work place

ACC and RACS statement

- Imaging i.e. Ultrasound is not necessary. Clinical diagnosis is sufficient
- No distinction between direct and indirect hernia is needed

Accurate documentation is essential !

Anatomical Differentiation of Direct and Indirect Inguinal Hernias: Is It Worthwhile in the Modern Era?

P. SANJAY,* J.L. FULKE, I.A. SHAIKH, AND A. WOODWARD

Department of Surgery, Royal Glamorgan Hospital, Llantrisant, Wales, United Kingdom

Clinical Anatomy 23:848–850 (2010)

TABLE 1. Comparison of Preoperative and Intraoperative Diagnosis and Clinical Accuracy

Preoperative diagnosis	Indirect hernia ($n = 272$)	Direct hernia ($n = 56$)
Intraoperative diagnosis		
Indirect	211 (77%)	25 (45%)
Direct	61 (33%)	31 (55%)

Indication for surgery: Symptomatic hernia !

Thank you