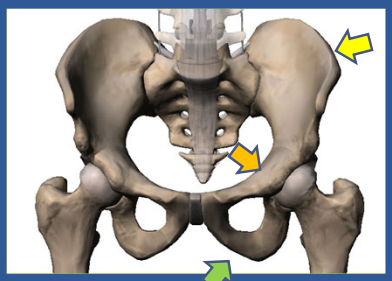
SURGICAL TREATMENT OF ATHLETIC PUBALGIA

Mark Zoland
MD, FACS

NOTHING TO DISCLOSE

SKELETAL ANATOMY

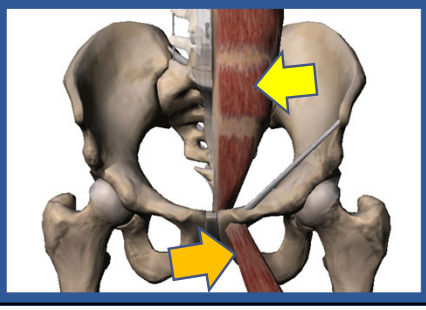
Ischium
Ilium
Pubis



ANATOMY

Rectus Abdominus

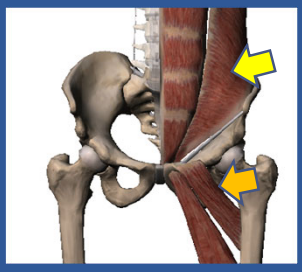
Adductor Longus



ANATOMY

Internal Oblique

Pectineus



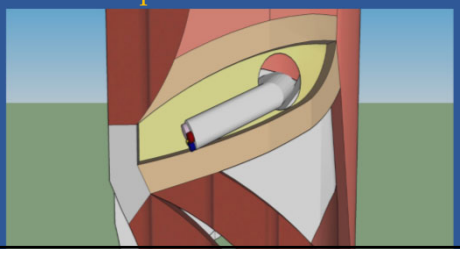
Structures of the Inguinal Canal

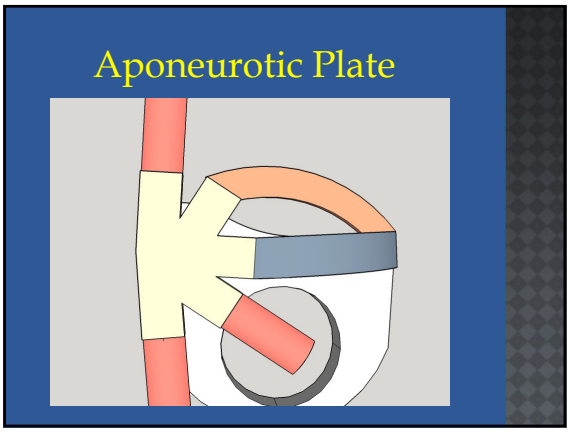
Inguinal Ligament

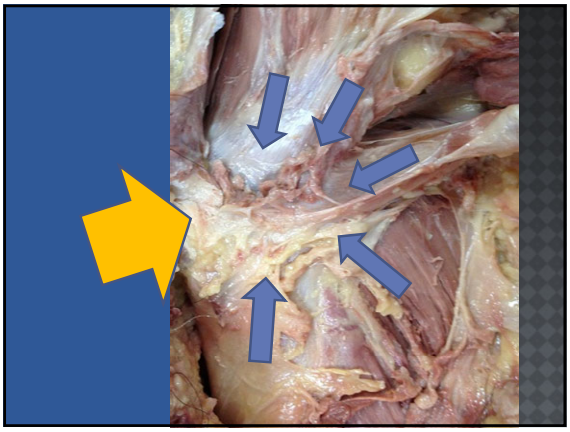
Conjoined Tendon

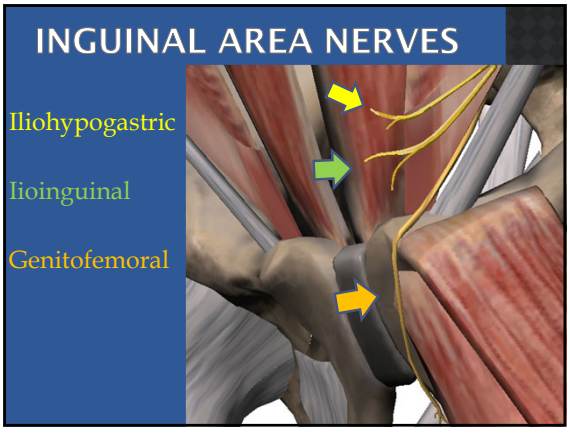
Transversalis Fascia

Aponeurotic Plate




Aponeurotic Plate




INGUINAL AREA NERVES
Iliohypogastric
Iioinguinal
Genitofemoral

PAIN GENERATORS NEEDING SURGERY

HERNIAS

TRANSVERSALIS ATTENUATION
(Gilmore's Groin, Inguinal Disruption)

APONEUROTIC PLATE DISRUPTION
(Athletic Pubalgia)

True Hernia

"Sports Hernia"

GILMORE'S GROIN
(TRANSVERSALIS FASCIA)

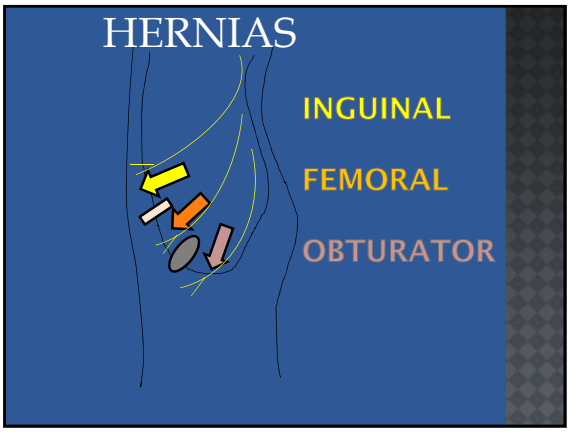
ATHLETIC PUBALGIA
(APONEUROTIC PLATE)

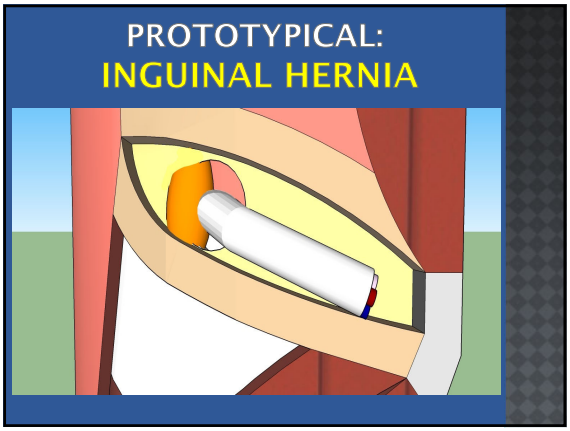
True Hernia

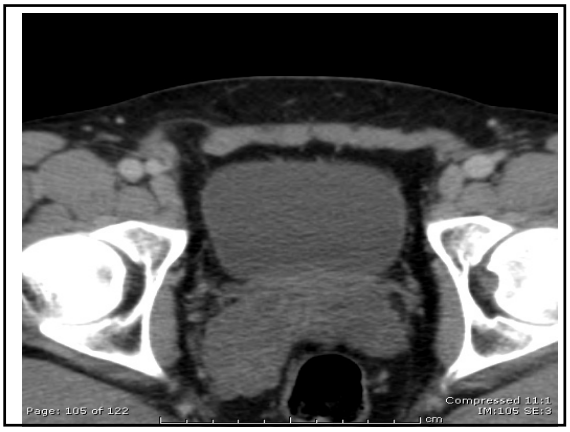
INGUINAL

FEMORAL

OBTURATOR


HERNIAS
INGUINAL
FEMORAL
OBTURATOR


PROTOTYPICAL:
INGUINAL HERNIA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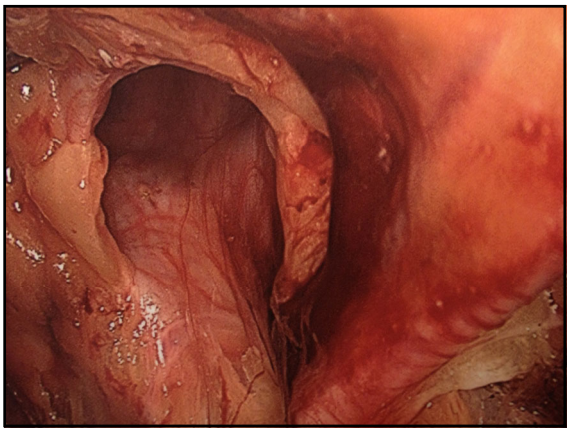


Hernias

REPAIRED WITH SURGERY, USUALLY LAPAROSCOPIC, USUALLY WITH MESH

(NOTHING WILL CHANGE THIS CONFIGURATION OTHERWISE)

True Hernia

"Sports Hernia"

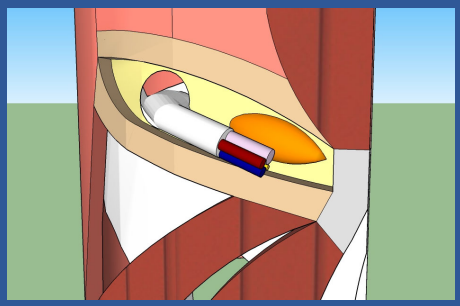
GILMORE'S GROIN
(TRANSVERSALIS FASCIA)

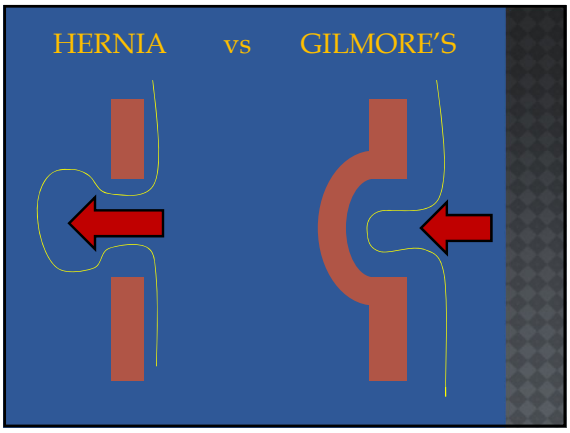
ATHLETIC PUBALGIA
(APONEUROTIC PLATE)

GILMORE'S GROIN

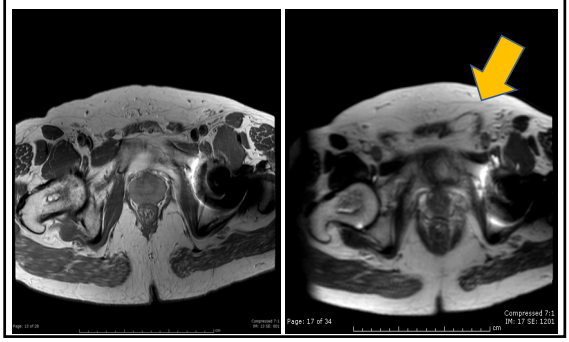
IN 1980 JERRY GILMORE BEGAN SEEING PROFESSIONAL ATHLETES FOR GROIN PAIN. HE DIAGNOSED MANY OF THEM WITH A GROIN DISRUPTION, WHICH LATER BECAME KNOWN AS A *GILMORE'S GROIN*. EXPLORATION REVEALED A BULGING OF THE POSTERIOR WALL.

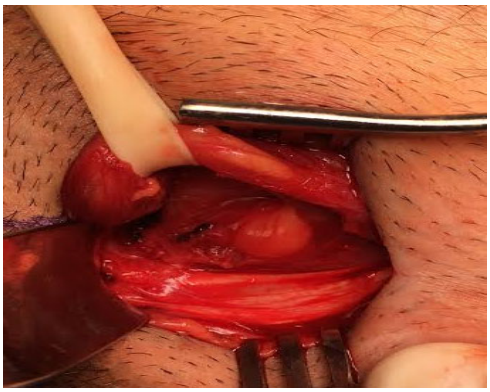
GILMORE'S GROIN: BULGING ATTENUATED TRANSVERSALIS



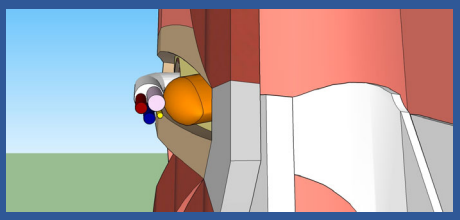


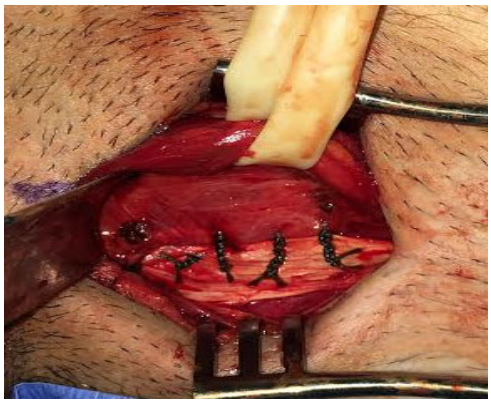
Same person, with and without valsalva; notice the protrusion on the right.





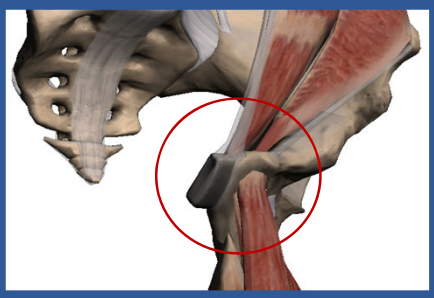
ATTENUATED TRANSVERSALIS FASCIA BULGES FORWARD IMPINGING ON THE NERVES





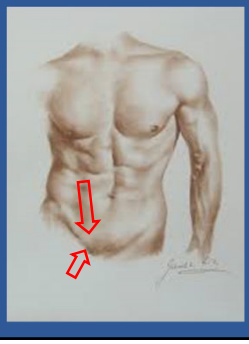
APONEUROTIC PLATE INJURY
(ATHLETIC PUBALGIA)

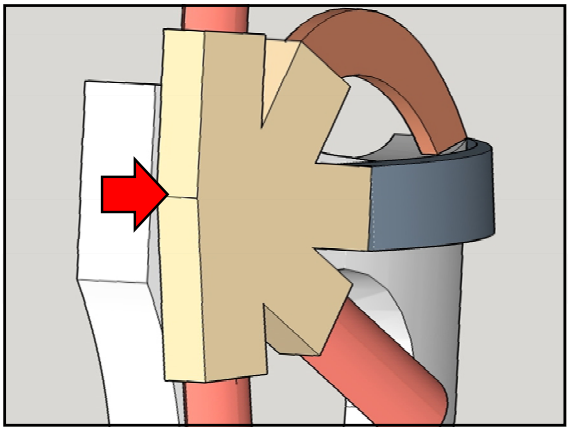
INJURIES INVOLVE THE PUBIC ATTACHMENTS

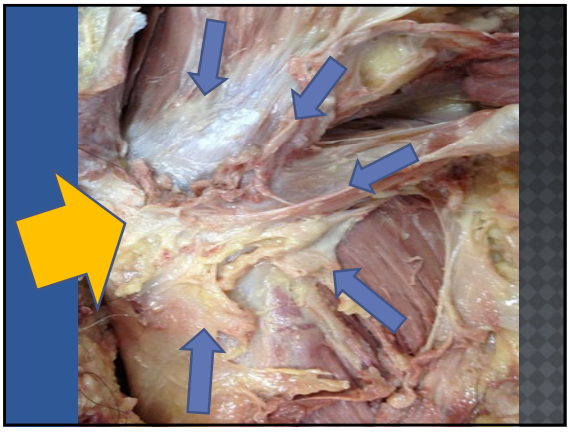


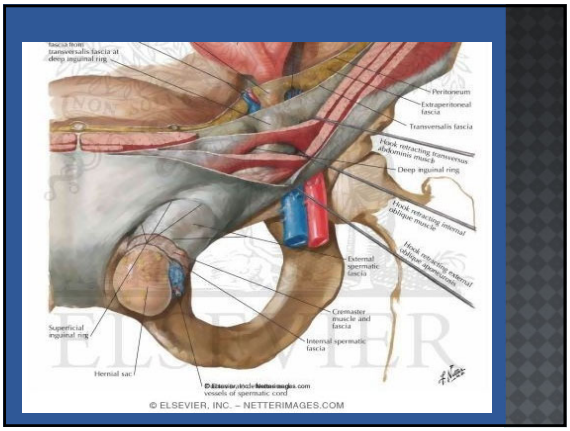
HISTORY AND EXAM

- Pain lateral to the rectus muscle
- Radiating down to pubis or to groin crease
- No hernia, but possibly weak floor
- Inguinal ligament pain
- Adductor tendon pain








Peritoneum
Extraperitoneal fascia
Transversalis fascia
Deep inguinal ring
External spermatic fascia
Cremaster muscle and fascia
Internal spermatic fascia
Superficial inguinal ring
Hernial sac
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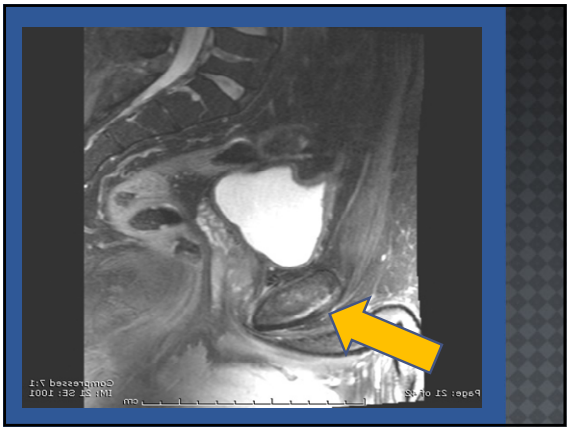
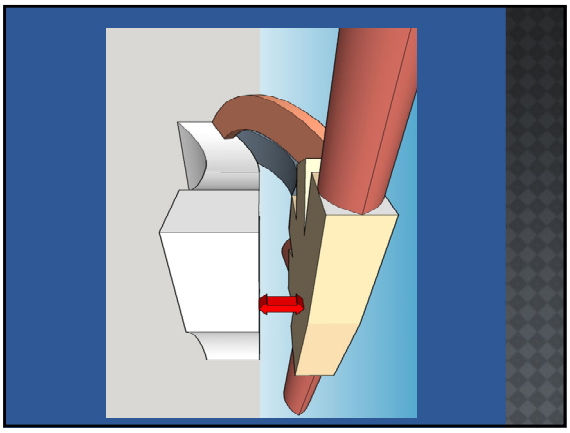
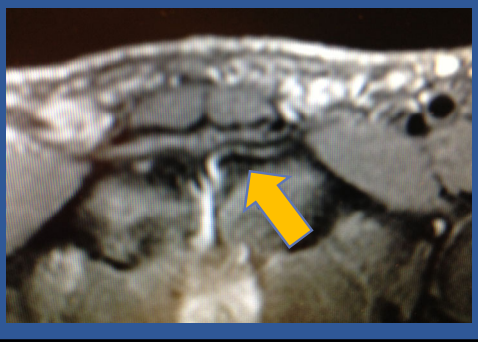
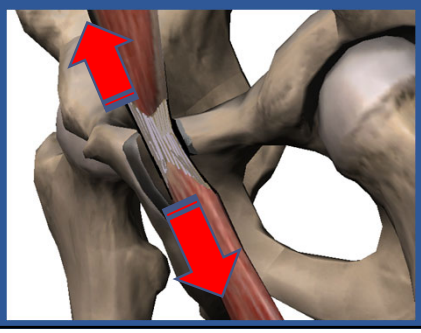




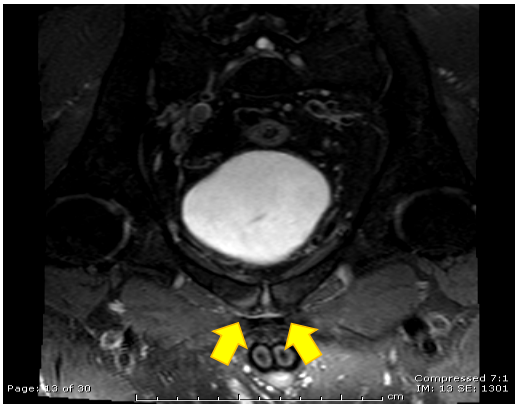
CLEFT SIGN



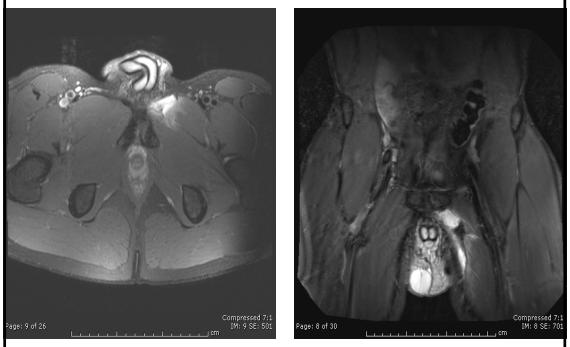
IF ENOUGH FORCE IS GENERATED, THE COMMON APONEUROSIS CAN BEGIN TO LIFT OFF THE PUBIS



THE INJURY MAY ALSO INVOLVE BOTH SIDES. FREQUENTLY WE SEE THE FLUID LAYER PROGRESSING ACROSS THE MIDLINE, SUGGESTING A BILATERAL APONEUROTIC PLATE DISRUPTION



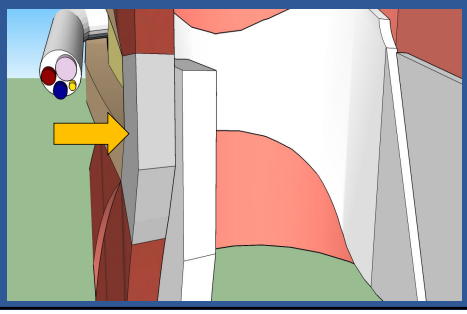
ADDUCTOR LONGUS PATHOLOGY CAN BE SUCH THE MAIN ASPECT OF THE INJURY; PARTIAL OR COMPLETE DISRUPTIONS OFF THE PUBIS CAN OCCUR.



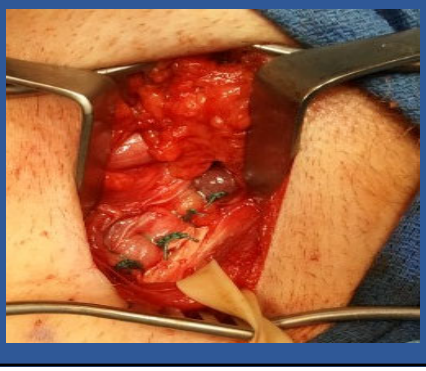
CRITERIA FOR SURGERY

- Acute or Chronic?
- High performance athlete?
- Adductor Fibro-cartilage disruption/retraction?
- Failed rest and PT?

REPAIR SECURES THE PLATE TO THE PUBIS, MEDIAL ASPECT OF THE FLOOR IS CLOSED

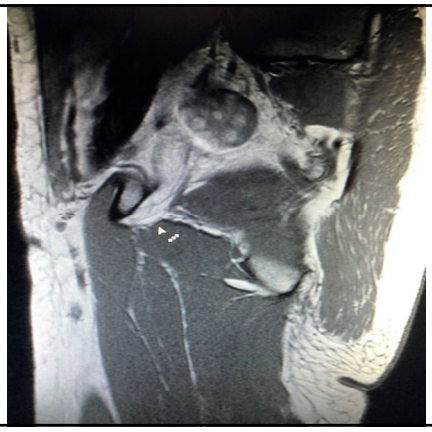


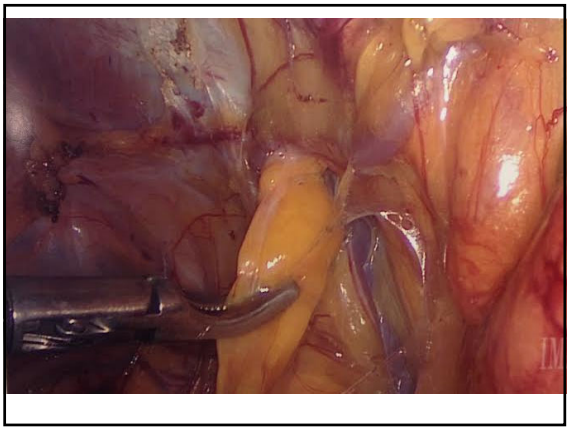
PUBALGIA REPAIR

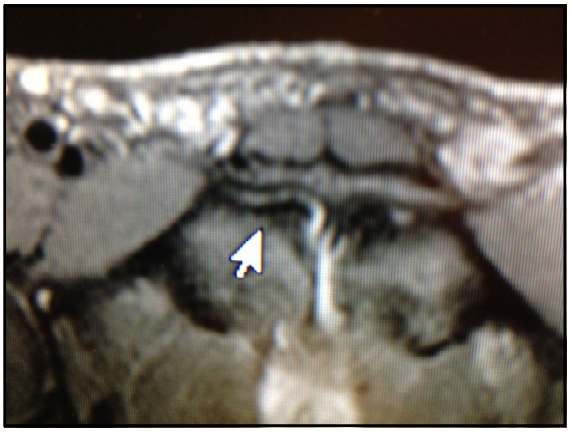


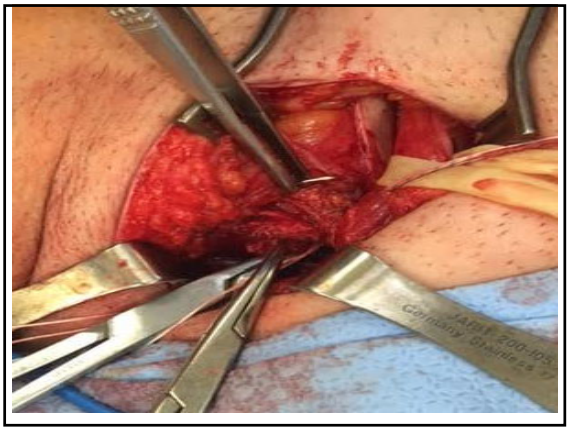
DIAGNOSTIC TESTING: PUBALGIA PROTOCOL MRI

- Axial T1/T2
- Sagital T1/T2
- Coronal T1/T2
- Oblique T1/T2
- Val Salva T1 fast sequence with comparison









Referral Patterns for Chronic Groin Pain, Athletic Pubalgia/Sports Hernia: MRI Findings, Management, and Results

American Journal of Orthopedics

- 117 patients, predominantly male, recreational and high performance athletes
- All required failed rest period and PT
- All had pubalgia protocol MRI
- Hernias seen in 35%
- 37% of patients with MRI positive findings did NOT require pubalgia surgery
- 93% who did undergo surgery were satisfied with the result

IMPORTANT CONSIDERATIONS

IF YOU SUSPECT ANY OF THE PATHOLOGIES, CONSIDER A PUBALGIA PROTOCOL MRI—DON'T ALWAYS TRUST THE READ

DEPENDING ON ACTIVITY LEVEL, SURGERY IS REASONABLE FOR WIDE AGE RANGE

MIGHT BE MORE AGGRESSIVE WITH THE ELITE PROFESSIONAL ATHLETE

BE WARY OF ADDUCTOR DISRUPTION—NARROW WINDOW OF OPPORTUNITY

Thank You