

# Literatuuroverzicht van oorzaken van Pubalgie

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## Dr. Thomas Mathieu

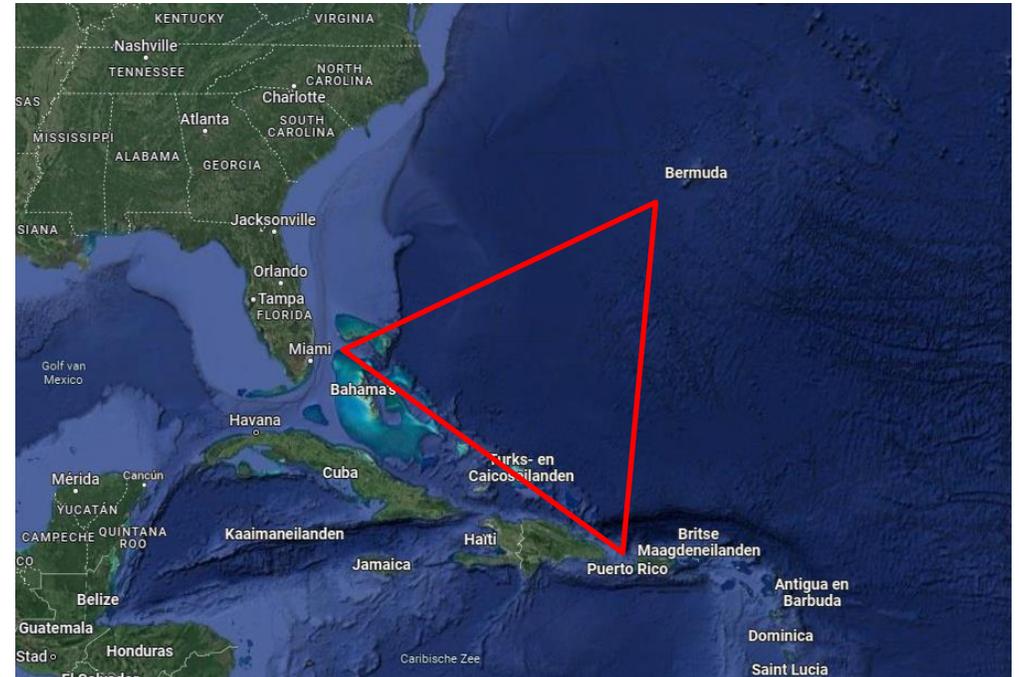
- Fysische Geneeskunde & Revalidatie
- Universitair Ziekenhuis Antwerpen (UZA)
- PhD: Pubic-related groin pain
- Royal Belgian Football Association
- Consulterend arts meerdere Sportteams



# Overzicht van oorzaken Pubalgie

Pijn in de lies- en schaambeenstreek:

- Moeilijk begrepen regio
- Dikwijls geen correcte diagnose
- Chroniciteit van klachten



Bermuda driehoek in de geneeskunde



# DOHA



- 1<sup>st</sup> WC on groin pain in athletes
- 24 experts
- Different backgrounds
- Systematic reviews process
- Agreement on terminology, classification system, therapy, ...

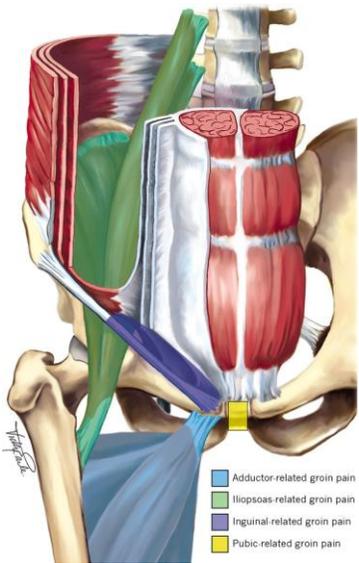
=> Nieuw, overzichtelijk classificatiesysteem

# WIDE LIST OF DIFFERENTIAL DIAGNOSIS

**Table 29.1** Differential diagnosis of groin pain

Intra-articular pathologies	Extra-articular pathologies	Non-musculoskeletal disorders
Femoroacetabular impingement (FAI) syndrome	Insertional adductor and rectus abdominis tendinopathy	<i><b>Intra-abdominal pathologies</b></i>
Acetabular labral tears	Groin pain disruption	Appendicitis
Chondral lesions	Osteitis pubis	Diverticulitis/diverticulosis
Femoral neck stress fractures	Greater trochanter pain syndrome	Lymphadenitis
Osteoarthritis	Lumbar radiculopathy	Inflammatory bowel disease
Transitory synovitis	Pubic ramus stress fracture	Inguinal hernia
Osteonecrosis of the femoral head	Apophyseal avulsion fractures	
Osteochondritis dissecans	Sacroiliac joint disorders	<i><b>Genitourinary</b></i>
Legg-Calvè-Perthes disease	Nerve entrapment	Adnexal torsion
Epiphysiolysis of the femoral head	Snapping hip syndrome	Nephrolithiasis
Septic arthritis		Orchitis
Oncologic process		Ovarian cysts
		Pelvic inflammatory disease
		Urinary tract infections
		Endometriosis
		Prostatitis
		Testicular cancer

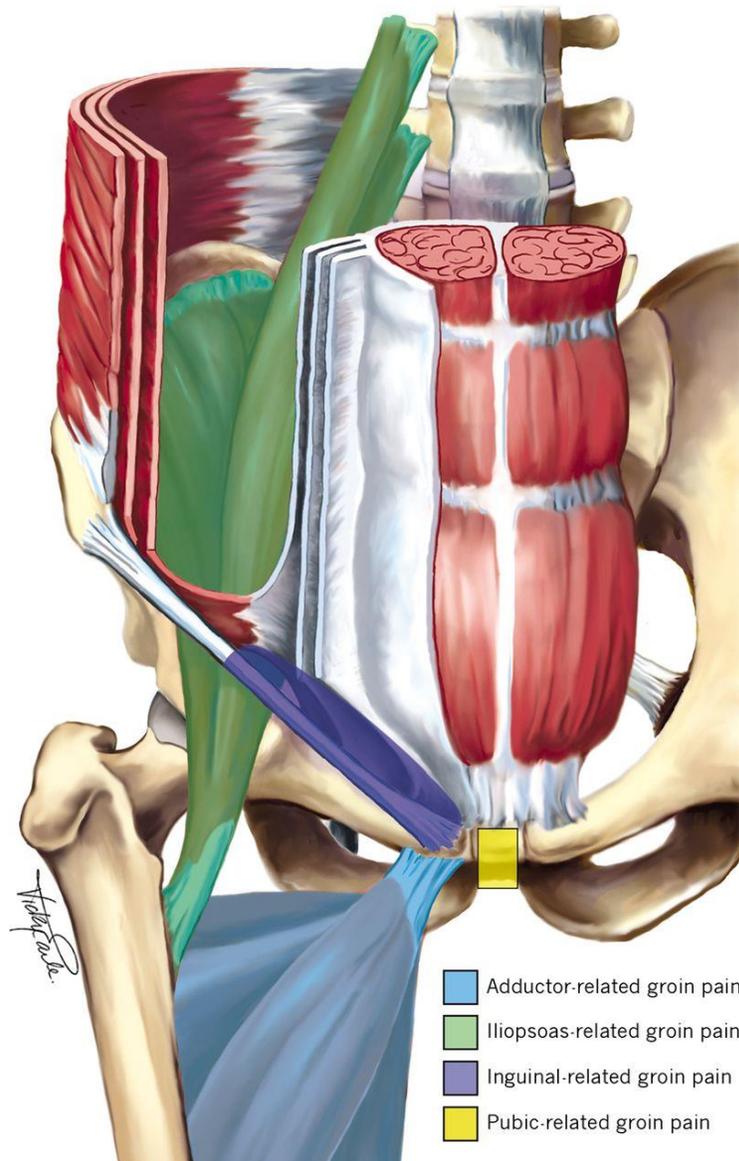
# !! NEW CLASSIFICATION SYSTEM !!



**Table 1** An overview of some of the possible causes of groin pain in athletes

Entities defined during the meeting	Other musculoskeletal causes	Not to be missed
Adductor-related groin pain Iliopsoas-related groin pain Inguinal-related groin pain Pubic-related groin pain Hip-related groin pain	Inguinal or femoral hernia Posthernioplasty pain Nerve entrapment <ul style="list-style-type: none"> <li>▶ Obturator</li> <li>▶ Ilioinguinal</li> <li>▶ Genitofemoral</li> <li>▶ Iliohypogastric</li> </ul> Referred pain <ul style="list-style-type: none"> <li>▶ Lumbar spine</li> <li>▶ Sacroiliac joint</li> </ul> Apophysitis or avulsion fracture <ul style="list-style-type: none"> <li>▶ Anterior superior iliac spine</li> <li>▶ Anterior inferior iliac spine</li> <li>▶ Pubic bone</li> </ul>	Stress fracture <ul style="list-style-type: none"> <li>▶ Neck of femur</li> <li>▶ Pubic ramus</li> <li>▶ Acetabulum</li> </ul> Hip joint <ul style="list-style-type: none"> <li>▶ Slipped capital femoral epiphysis (adolescents)</li> <li>▶ Perthes' disease (children and adolescents)</li> <li>▶ Avascular necrosis/transient osteoporosis of the head of the femur</li> <li>▶ Arthritis of the hip joint (reactive or infectious)</li> </ul> Inguinal lymphadenopathy Intra-abdominal abnormality <ul style="list-style-type: none"> <li>▶ Prostatitis</li> <li>▶ Urinary tract infections</li> <li>▶ Kidney stone</li> <li>▶ Appendicitis</li> <li>▶ Diverticulitis</li> </ul> Gynaecological conditions Spondyloarthropathies <ul style="list-style-type: none"> <li>▶ Ankylosing spondylitis</li> </ul> Tumours <ul style="list-style-type: none"> <li>▶ Testicular tumours</li> <li>▶ Bone tumours</li> <li>▶ Prostate cancer</li> <li>▶ Urinary tract cancer</li> <li>▶ Digestive tract cancer</li> <li>▶ Soft tissue tumours</li> </ul>

# !! NEW CLASSIFICATION SYSTEM !!



## 1. Defined clinical entities for groin pain

### ***Adductor-related groin pain:***

Adductor tenderness AND pain on resisted adduction testing.

### ***Iliopsoas-related groin pain:***

Iliopsoas tenderness + more likely if pain on resisted hip flexion AND/OR pain on hip flexor stretching.

### ***Inguinal-related groin pain:***

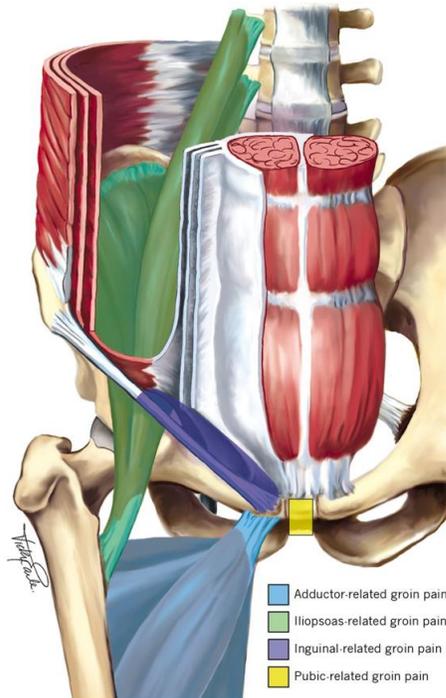
Pain in inguinal canal region AND tenderness of the inguinal canal. No palpable inguinal hernia is present. More likely if aggravated with abdominal resistance OR Valsalva/cough/sneeze.

### ***Pubic-related groin pain:***

Local tenderness of the pubic symphysis and the immediately adjacent bone. No particular resistance tests to test specifically for pubic-related groin pain.

# !! NEW CLASSIFICATION SYSTEM !!

## 1. 4-Clinical entities for groin pain



### ***Adductor-related groin pain:***

Adductor tenderness AND pain on resisted adduction testing.

### ***Iliopsoas-related groin pain:***

Iliopsoas tenderness + more likely if pain on resisted hip flexion AND/OR pain on hip flexor stretching.

### ***Inguinal-related groin pain:***

Pain in inguinal canal region AND tenderness of the inguinal canal. No palpable inguinal hernia is present. More likely if aggravated with abdominal resistance OR Valsalva/cough/sneeze.

### ***Pubic-related groin pain:***

Local tenderness of the pubic symphysis and the immediately adjacent bone. No particular resistance tests to test specifically for pubic-related groin pain.

## + Hip-related groin pain

- Coxartrose
- Femoro-acetabulair Impingement (FAI)
- Acetabulaire labrumletsels
- ...

# CLINICAL TEST BATTERY FOR GROIN PAIN



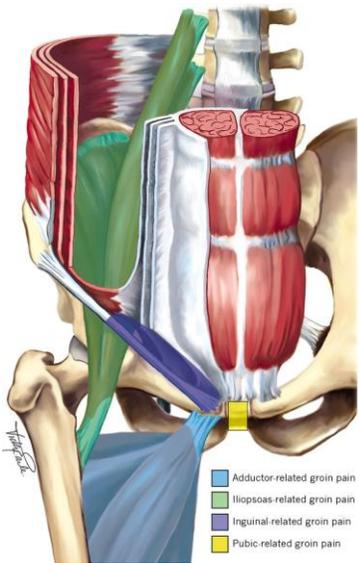
# CLINICAL TEST BATTERY FOR GROIN PAIN

- Lumbar spine (flexion, extension, lateral flexion, Trendelenburg)
- Hip tests (deep flexion, Fadir, Faber, Gondel sign)
- Adductor resistance tests (hip extension, hip 45°-90° flexion)
- Iliopsoas resistance tests (hip flexion test (-10°, 0°, 90°), Thomas test)
- Abdominal resistance tests
- Palpation (Adductors, Iliopsoas, Abdominal muscles, Pubic symphysis)

! Attention: tenderness vs pain !

- Extra, specific tests: Valsalva maneuver, palpation inguinal hernia, ...

# !! NEW CLASSIFICATION SYSTEM !!



**Table 1** An overview of some of the possible causes of groin pain in athletes

Entities defined during the meeting	Other musculoskeletal causes	Not to be missed
<p>Adductor-related groin pain</p> <p>Iliopsoas-related groin pain</p> <p>Inguinal-related groin pain</p> <p>Pubic-related groin pain</p> <p>Hip-related groin pain</p>	<p>Inguinal or femoral hernia</p> <p>Posthernioplasty pain</p> <p>Nerve entrapment</p> <ul style="list-style-type: none"> <li>▶ Obturator</li> <li>▶ Ilioinguinal</li> <li>▶ Genitofemoral</li> <li>▶ Iliohypogastric</li> </ul> <p>Referred pain</p> <ul style="list-style-type: none"> <li>▶ Lumbar spine</li> <li>▶ Sacroiliac joint</li> </ul> <p>Apophysitis or avulsion fracture</p> <ul style="list-style-type: none"> <li>▶ Anterior superior iliac spine</li> <li>▶ Anterior inferior iliac spine</li> <li>▶ Pubic bone</li> </ul>	<p>Stress fracture</p> <ul style="list-style-type: none"> <li>▶ Neck of femur</li> <li>▶ Pubic ramus</li> <li>▶ Acetabulum</li> </ul> <p>Hip joint</p> <ul style="list-style-type: none"> <li>▶ Slipped capital femoral epiphysis (adolescents)</li> <li>▶ Perthes' disease (children and adolescents)</li> <li>▶ Avascular necrosis/transient osteoporosis of the head of the femur</li> <li>▶ Arthritis of the hip joint (reactive or infectious)</li> </ul> <p>Inguinal lymphadenopathy</p> <p>Intra-abdominal abnormality</p> <ul style="list-style-type: none"> <li>▶ Prostatitis</li> <li>▶ Urinary tract infections</li> <li>▶ Kidney stone</li> <li>▶ Appendicitis</li> <li>▶ Diverticulitis</li> </ul> <p>Gynaecological conditions</p> <p>Spondyloarthropathies</p> <ul style="list-style-type: none"> <li>▶ Ankylosing spondylitis</li> </ul> <p>Tumours</p> <ul style="list-style-type: none"> <li>▶ Testicular tumours</li> <li>▶ Bone tumours</li> <li>▶ Prostate cancer</li> <li>▶ Urinary tract cancer</li> <li>▶ Digestive tract cancer</li> <li>▶ Soft tissue tumours</li> </ul>

## 2. OTHER MUSCULOSKELETAL CAUSES



- Inguinale of Femorale hernia

- Acuut
- Chronisch
- Posthernioplastie pijn

- Nerve entrapment

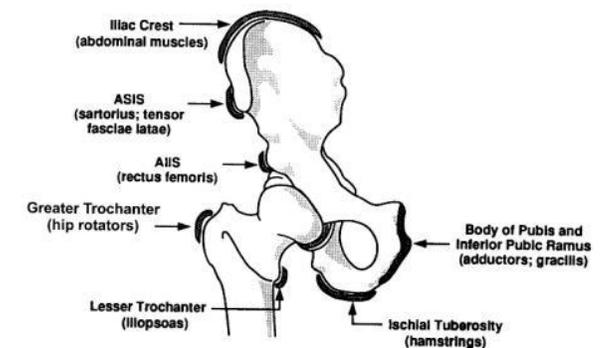
- N. Obturatorius
- N. Ilioinguinalis
- N. Genitofemoralis
- N. Iliohipogastricus

- Gerefereerde pijn

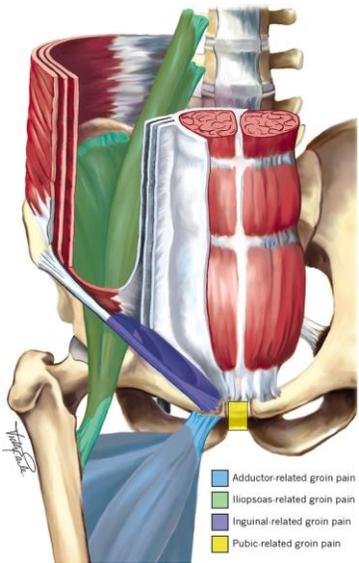
- Lumbale wervelzuil
- Sacro-iliacaal gewricht

- Apofysitis of Avulsie fractuur

- Spina Iliaca Anterior Superior
- Spina Iliaca Anterior Inferior
- Os Pubis



# !! NEW CLASSIFICATION SYSTEM !!

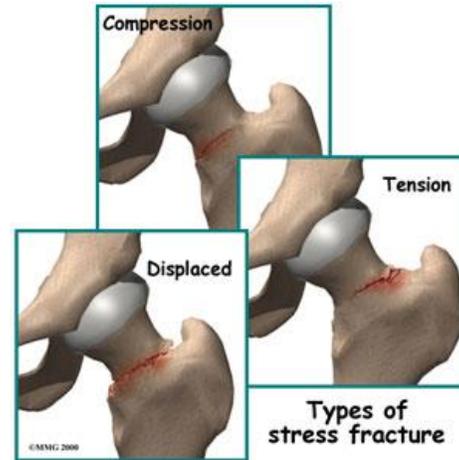


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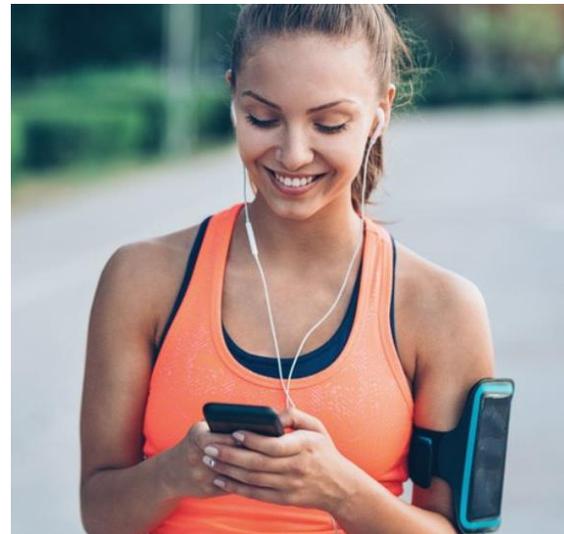
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# NOT TO BE MISSED

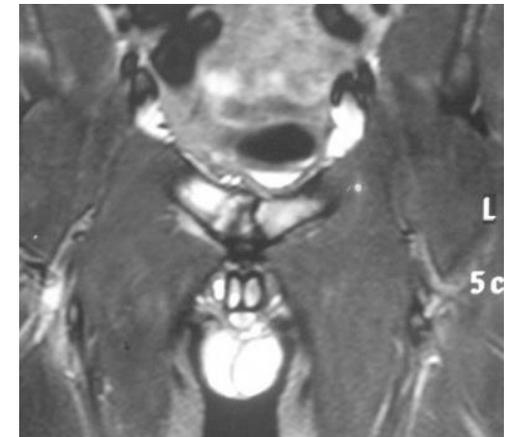
- Stress fracture
  - Neck of femur
  - Pubic ramus
  - Acetabulum



1967



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# NOT TO BE MISSED

- Heupathologie
  - Slipped capital femoris epiphysis
  - Perthes' disease
  - Arthritis of the hip joint (reactive or infectious)
  - Avascular necrosis/transient osteoporosis of the femoral head



# NOT TO BE MISSED

- Intra-abdominale pathologie
  - Prostatitis
  - UWI
  - Nierstenen
  - Appendicitis
  - Diverticulitis
  - ...
  
- Gynaecologische pathology
  - Ovariële cysten
  - Extra Uteriene Graviditeit (EUG)
  - ...

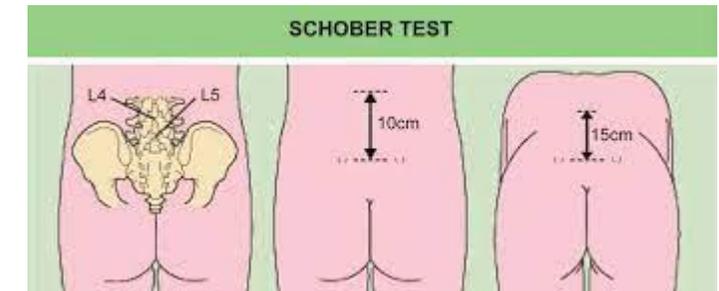
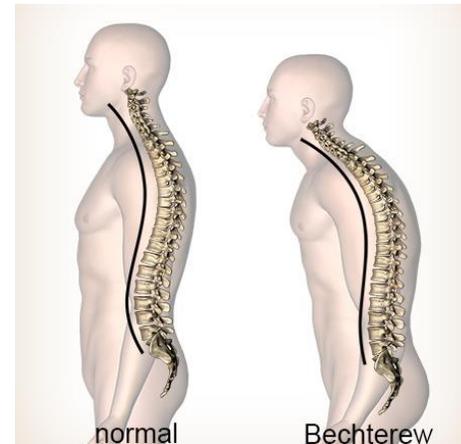


# NOT TO BE MISSED

- Inguïnale lymfadenopathie



- Spondylartropathie
  - Ziekte van Bechterew



# NOT TO BE MISSED

- Tumoren
  - Testicular tumours
  - Bone tumours
  - Prostate cancer
  - Urinary tract cancer
  - Digestive tract cancer
  - Soft tissue tumours

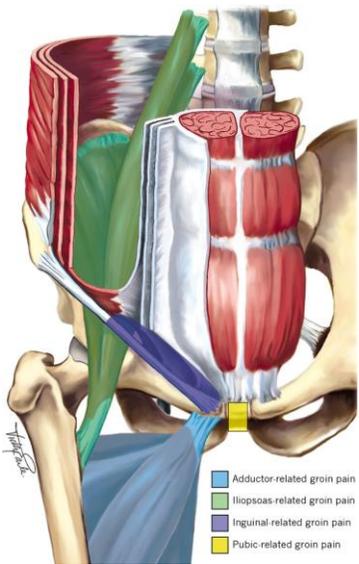
⇒ Uitgebreide anamnese

⇒ Red flags

⇒ Verdere beeldvorming



# TAKE HOME MESSAGE



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*The End*

