

# Femoroacetabular Impingement

Is this an answer for groin strain?

(Probably a bit of it)

Dr Dan Bates  
Sports Medicine Registrar

## Groin Pain

- AFL
- Soccer
- American football
- Ice Hockey
- Tennis
- Rugby
- Running, cutting and weaving sports



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## Stats

- Soccer
  - 12% of injuries
  - 2-3x more likely to have going pain the next season
- Rugby 10<sup>th</sup> most common injury



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## Stats

- AFL- 2007 injury report - Incidence

Hip/ groin/ thigh	Groin strains/osteitis pubis	4.1	3.2	3.1	3.0	3.5	3.8	2.8	3.1	2.9	3.3	4.1
Hamstring strains	6.6	6.4	6.7	5.6	6.0	4.4	5.8	6.3	5.2	6.4	6.7	
Quadriceps strains	2.5	3.0	2.4	2.0	1.6	1.7	2.0	1.9	1.9	1.7	1.8	
Thigh and hip haematomas	1.3	1.3	1.1	1.1	0.6	1.0	0.3	1.1	1.0	1.1	0.6	
Other hip/groin/thigh injuries	0.4	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.8	

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## Stats

- AFL – 2007 injury report – Games lost

Hip/ groin/ thigh	Groin strains/osteitis pubis	17.4	13.6	9.4	7.5	13.6	15.7	13.6	13.3	11.2	14.0	18.0
Hamstring strains	20.9	21.0	22.3	22.4	21.3	15.6	18.7	21.6	18.6	21.8	24.3	
Quadriceps strains	8.6	9.5	6.7	5.6	3.8	4.3	6.0	4.2	6.4	5.5	5.6	
Thigh and hip haematomas	2.4	1.8	1.5	1.8	0.6	1.9	0.5	1.7	1.6	1.4	1.0	
Other hip/groin/thigh injuries	1.7	0.5	2.3	1.4	1.7	1.2	1.5	2.6	1.0	2.3	4.5	

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## Stats

- AFL – 2007 injury report - Recurrence

Injury type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Hamstring strains	38%	36%	31%	37%	25%	30%	27%	22%	26%	16%	22%
Groin strains	36%	31%	6%	16%	20%	23%	20%	24%	23%	28%	38%
Ankle sprains	20%	21%	9%	11%	17%	16%	6%	11%	15%	10%	20%
Quadriceps strains	35%	20%	20%	18%	10%	17%	9%	6%	20%	19%	18%
Calf strains	15%	15%	17%	32%	17%	13%	14%	6%	12%	7%	9%
ALL INJURIES	20%	19%	14%	16%	15%	13%	14%	11%	14%	12%	16%

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## So what is Groin Strain?

- Code for – Not Sure
- Although we are getting much better



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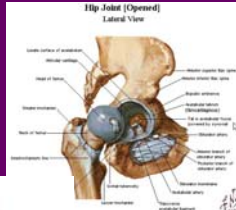
## Femoroacetabular Impingement (FAI)

- 2 Recent case series
  - Adelaide Approx 300 patients
    - 160 with FAI
  - England 218 patients
    - 50% with Hip joint pathology (Bradshaw 2008)



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## Anatomy



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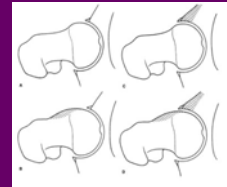
## FAI – What is it?

Bony growth on the top/front of the Neck of the femur

- CAM Impingement
- CAM lesion/Ganz Lesion

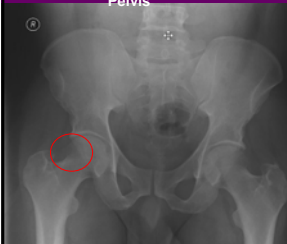
Acetabulum point Backwards instead of forwards

- Pincer Impingement

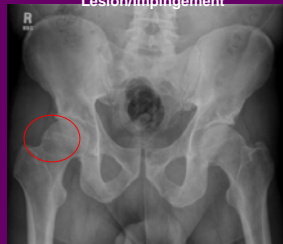


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Normal Pelvis



CAM Lesion/Impingement



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## FAI – What Causes it?

The possibilities

- Growth of growth plate down femoral neck
  - ? Effect of training load
- Sipped upper femoral epiphysis
- ? Genetic predisposition



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## FAI - Why does it matter

- Labral tears
- Cartilage damage
- Early Osteoarthritis
- Early joint replacement



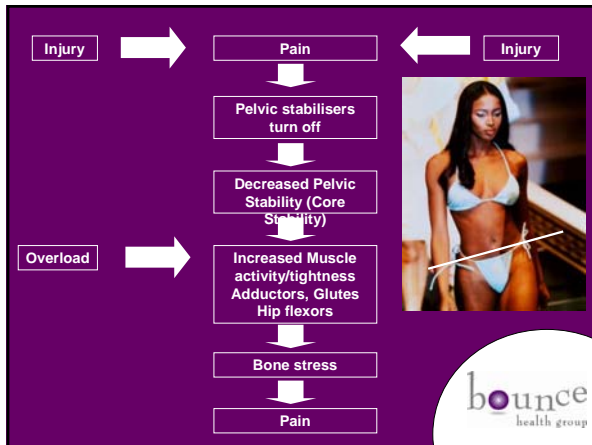
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## FAI – What do they complain of?

- “My hip flexors are tight”
- Tight adductors, hamstrings and back
- Chronic recurrent groin pain



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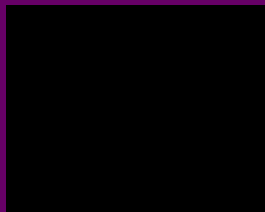
## FAI – What do they complain of?

- And/or
  - Vague deep pain,
  - Located about the middle of the groin crease
  - May be lateral thigh, or buttock pain
- Grasp sign
- Worse with running and kicking
- Worse with getting in and out of the car
- Pain doing up shoe laces
- Decreased agility – difficulty getting down to the ball, unable to make quick turns – end up doing big circles

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## FAI – What do they complain of?

- Decreased Internal rotation
- Pain on FADIR (impingement test)



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## Great half my team has FAI!

- What do you do about it?

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