

# Evaluation and Management of the Child with an Acute Limp

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# Irritable Hip

- Common (1.8 per 1000 children)
- The cause of a limp can range from a life-threatening bone tumour to a stone in a child's shoe
- Transient synovitis responsible for >90% of cases



# Transient Synovitis

- 0.4-0.9% of attendances to paediatric A&E
- Acute, self-limiting inflammation of the synovial lining of the hip
- Pain, stiffness and limp
- Cause unknown (viral / trauma / allergic)
- Recurrence rate of 4-17%
- Seasonal (autumn)

# Classical Presentation

- 3-8 years of age
- Male (male : female = 2 : 1)
- Acute unilateral hip pain assoc. with a limp
- Reduced motion
- Hip in flexion and external rotation
- Low grade fever

# Evaluation

- Diagnosis of exclusion
- History
- Examination – look, feel and move
- Investigations – FBC, CRP, PV
- Imaging – USS +/- radiographs

\*New atraumatic limping child protocol\*



# Examination (1)



# Examination (2)



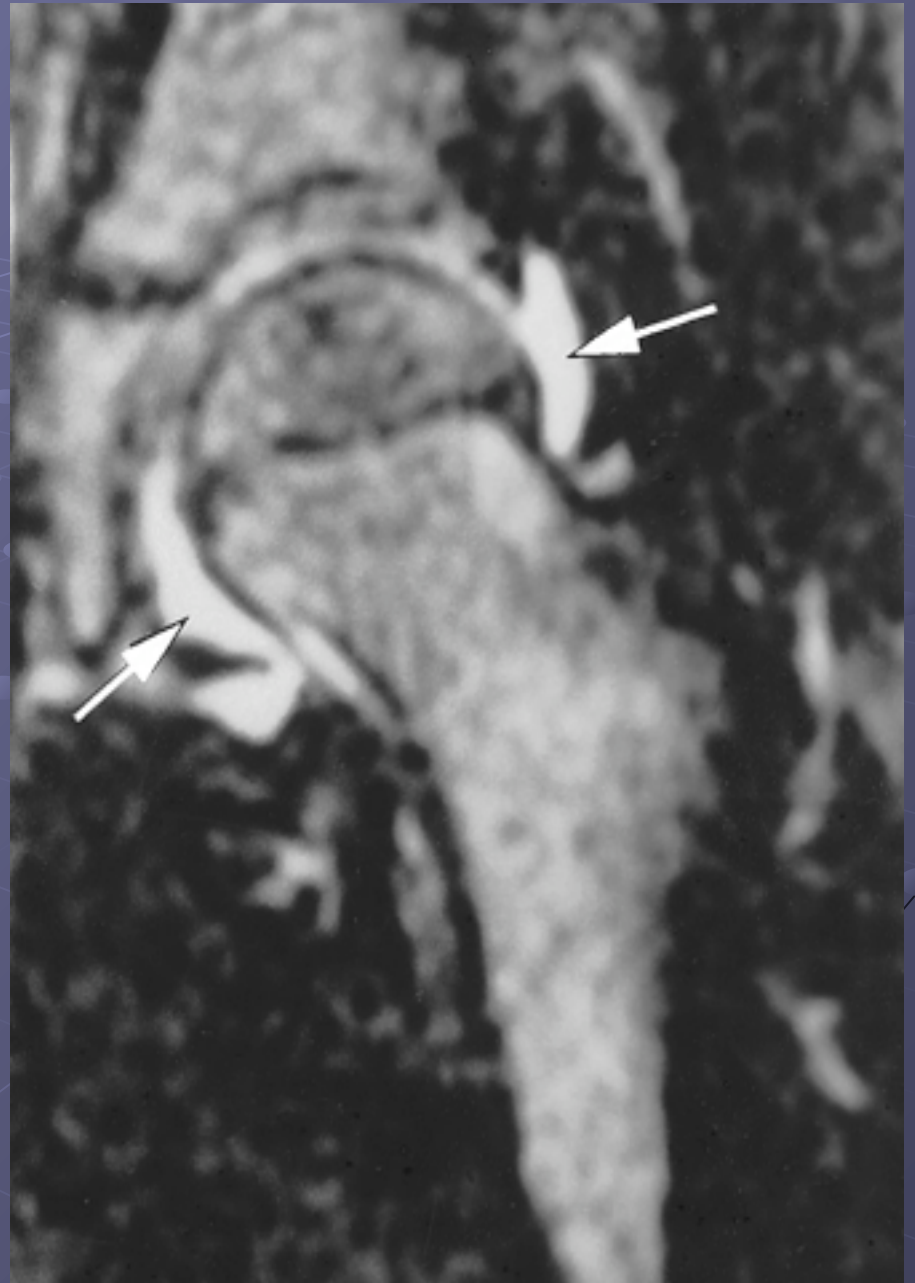
# Treatment of Transient Synovitis

- Rest
- Analgesia
- Review in 10 days

(occasionally patients may merit admission for analgesia)



Magnetic  
Resonance  
Imaging of the  
hip in the acutely  
limping child



# Three Part Question / Search Strategy

- In [a child with an irritable hip] is [MRI better than USS] at [detecting hip pathology]
- Medline 1966 to 11/01 using the OVID interface.  
[{hip joint OR hip} AND {pain OR irritable OR limp OR synovitis} AND {paediatric OR child} AND {ultrasound OR magnetic resonance imaging}]. LIMIT to human AND english.

# Results of 'Best Evidence' Search

Author, date and country	Patient group	Study type	Key findings
White <i>et al.</i> 2001, UK	50 children with irritable hip	Prospective	MRI identified all 7 children with serious pathology whereas USS only diagnosed 2
Ranner <i>et al.</i> 1989, Austria	45 children with acute hip pain	Prospective	MRI gave more morphological info. than other techniques (USS etc.)
Lee <i>et al.</i> 1999, Korea	9 children with septic arthritis and 14 children with transient synovitis	prospective	MRI signal intensity alterations were seen in sepsis but not transient synovitis

# Conclusions

- Small number of studies
- Cohort size small
- Timing of investigations varied
- Some variation in findings

Clinical bottom line:

- MRI may become imaging modality of choice in the future for evaluation of the acute limping child, where it is available



## References

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# Discussion

