


Cases for discussion

June 2009 –
orthopaedic teaching



Kate – aged 5 yrs

- Presentation
 - one week limp, brought to A and E by parents
 - No observed trauma, otherwise well
- Examination
 - well, afebrile, swollen right ankle

Investigations

- FBC, ESR – normal
- Radiograph – effusion
- MRI – effusion, synovitis
- Arthroscopy and synovial biopsy
 - “non specific chronic inflammatory changes”
- Synovial fluid culture – negative

Management

- NSAIDS, analgesics prn
- Refer back to GP
- Discharged from orthopaedics

Questions

- Diagnosis
- Investigations
 - Appropriate ?
 - Any omissions ?
- Management
 - Appropriate ?
 - Anything to be done differently ?

A few weeks later

- Parents take her back to GP
 - Slow in the mornings, “not herself”, Limping more
 - Teachers report clumsy at school
 - Left knee swollen also
- Referred paed rheum

First Paed rheum assessment

(almost 6 months since onset)

- Effusions both knees and right ankle
- Developing flexion contractures, muscle wasting
- Missing school and PE
- Diagnosis – Oligo JIA
- Management
 - Fast track eye screening (high risk)
 - Joint injections (GA) with bloods (?MTX) and splinting
 - Physio / OT input +++
 - Education and support to family

Pointers to JIA

- Well child with joint swelling and normal bloods
- “not septic and not trauma, JIA most likely”
- Probe for inflammatory symptoms
- Screen all joints
- Check for evidence of chronicity
- Check for “asymptomatic” joint disease

Examination



Look for signs of chronicity

(e.g muscle wasting, leg length inequality, deformity)

**Worth looking elsewhere....
screening all joints and for other clues**





Key points

- Consider paed rheum BEFORE invasive tests
- Don't delay referral awaiting tests
- Refer not discharge

- **High risk uveitis and visual loss**

Case 2

- 9 yr old boy, Swollen painful toe – 1/52
- Keen footballer, no obvious trauma
- Well in himself

Investigations

- FBC
 - Hb 11.5, MCV 90
 - WCC 7.2
 - Plats 300
- ESR – 20 mm/hr
- Radiograph – no fracture



Management

- Joint aspiration and open biopsy
- Antibiotics (IV and then oral)

Referral to paediatric rheumatology

- “swollen toe not getting any better”
- Complaints of joint pain elsewhere

First Paed rheum assessment

(almost 4 months since onset)

- Swollen and restricted fingers (asymmetrical)
- Restricted jaw opening
- Restricted and painful hip and knee
- Missing school and PE





Diagnosis – Juvenile Psoriatic arthritis

- Management
 - Joint injections (GA) with repeat bloods
 - Methotrexate
 - Eye screening (high risk)
 - Physio / OT input +++
 - Education and support to family

Juvenile Psoriatic Arthritis

- Arthritis usually precedes rash in children (opposite to adults)
 - Family history often positive for psoriasis check nails and scalp
- Suspect if single swollen small joint / whole digit (dactylitis)
- Also high risk uveitis
- Poor prognosis and early use of MTX advocated



Case 3

- 14 yr old boy, right knee pain and low back pain for “few weeks”, most days, no trauma, helped by NSAIDs, no fever or systemic upset
- Intermittent abdominal pain
 - Worse after NSAIDS
- Examination
 - Uncomfortable sitting / standing, thin, looks unwell
 - Swollen knee, restricted right hip and low back movement

Investigations

- Hb 10.4, WCC 9 (normal differential), platelets 650, ESR 55, CRP 35
- Radiographs – normal (including frog views)
- Thoughts ?

Enthesitis related arthritis

- Often starts with oligo-arthritis +/- enthesitis
 - Consider in patients with isolated hip involvement or foot and ankle involvement (*think in “resistant” Sever’s disease*)
 - Often older boys, Often HLA B27+,
 - Association acute red eye (different to young female onset oligo JIA where uveitis is asymptomatic)
 - Risk of developing Ankylosing Spondylitis as young adults
- Association with inflammatory bowel disease
 - Consider with “NSAID intolerance”



Key points

- Isolated hip involvement – unusual in JIA
- Think JIA with older child / adolescent (often boys) with inflammatory back pain,
 - ? Family history ankylosing spondylitis ? Crohns
- NSAIDS intolerance in children unusual
 - Usually pathological (? IBD)
 - Consider IBD – joints may precede GI symptoms