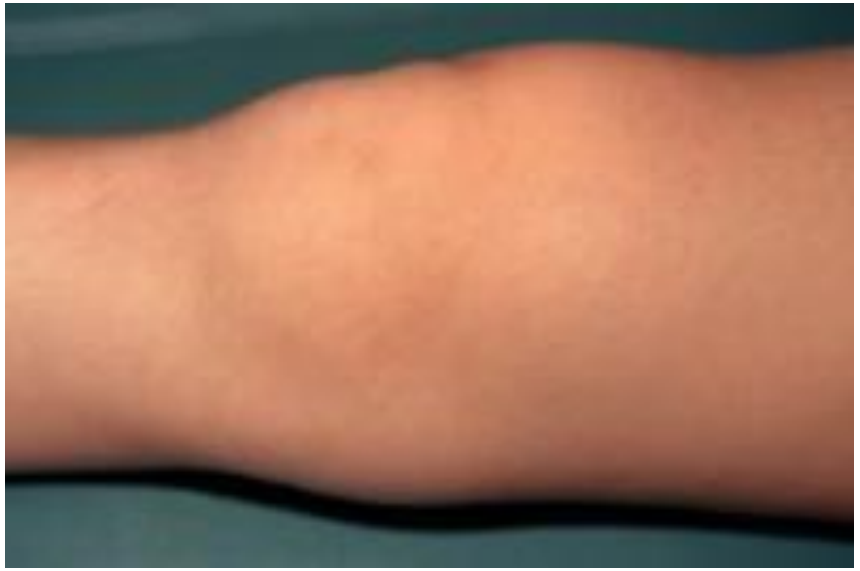
JIA Subtypes: Typical Cases

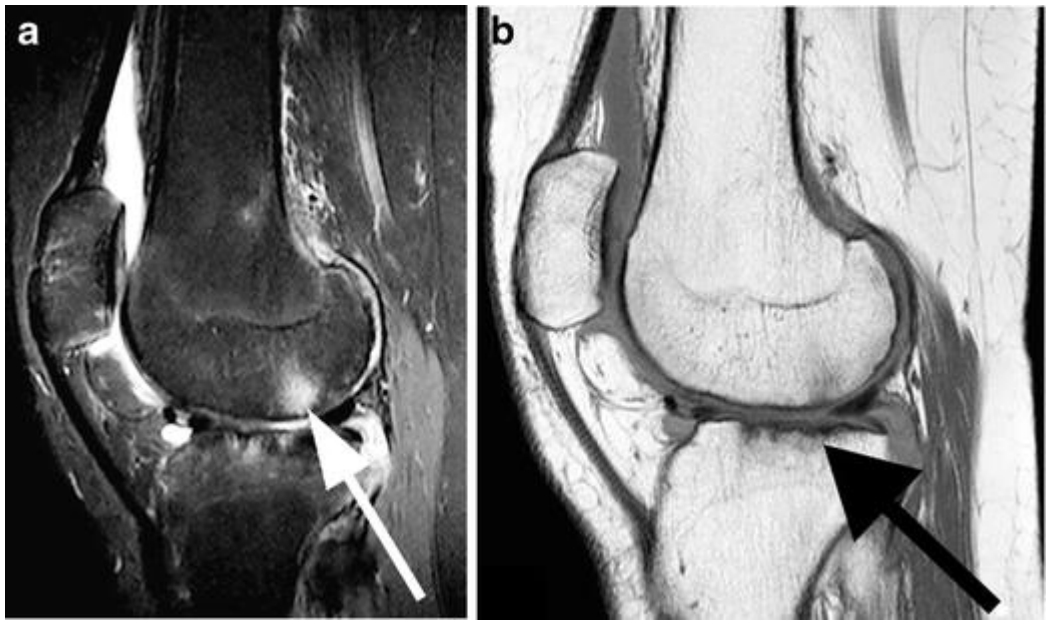
- Oligoarthritis
  - Alicia 4 y.o.
  - 3 weeks ago Fell on her R

  knee playing
  - 2 days later swelling in the

  knee, warm, NWB
  - Worse for 2-3 hours after

  getting out of bed
  - GP prescribed ibuprofen and referred to orthopaedic team
  - X rays show soft-tissue swelling

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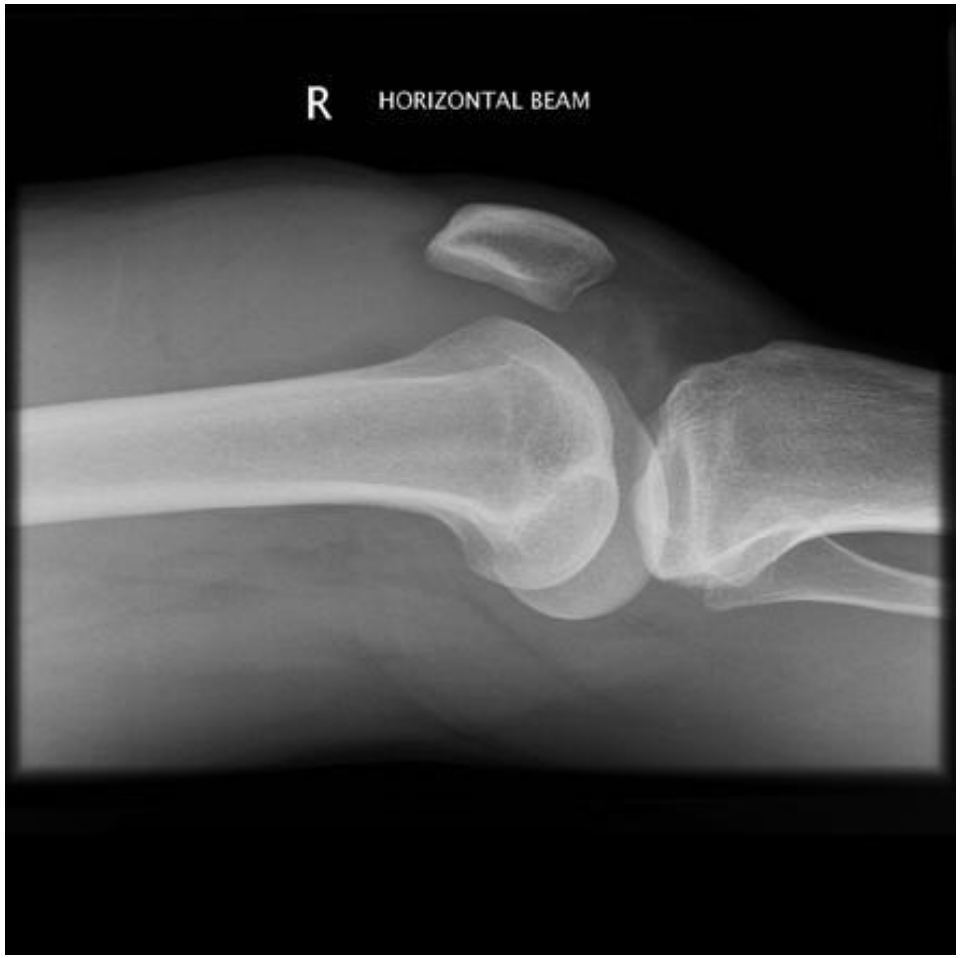
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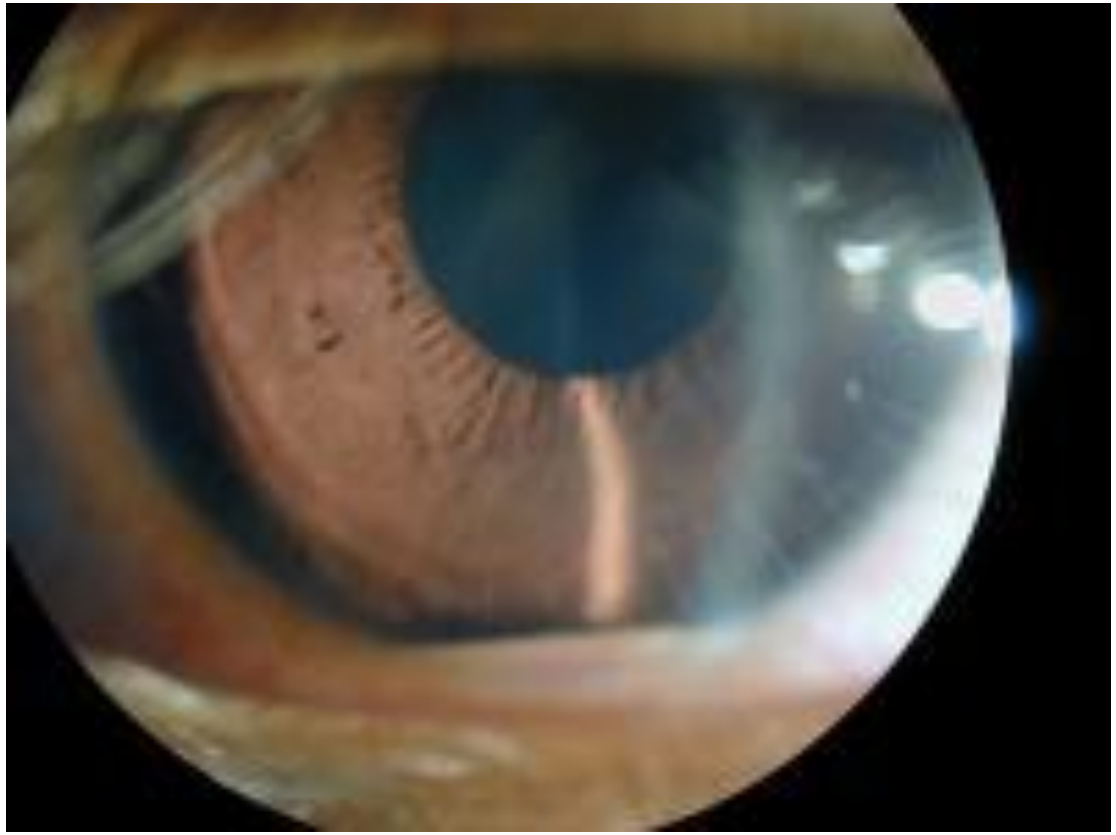
HORIZONTAL BEAM

Oligoarthritis

- Orthopaedic assessment:
    - 20 degrees FFD
    - Knee kept in external rotation and “dragged” on the side
    - Allows examination of her knee, although in pain*
    - Blood tests showed:
        - FBC normal
        - ESR 40
    - Not for arthroscopy, Referred patient to paediatric rheumtologist
- Paediatric rheumatology assessment
    - Similar findings on clinical examination, however, on examination of the external eye structures:

Severe Anterior Uveitis: Hypopyon

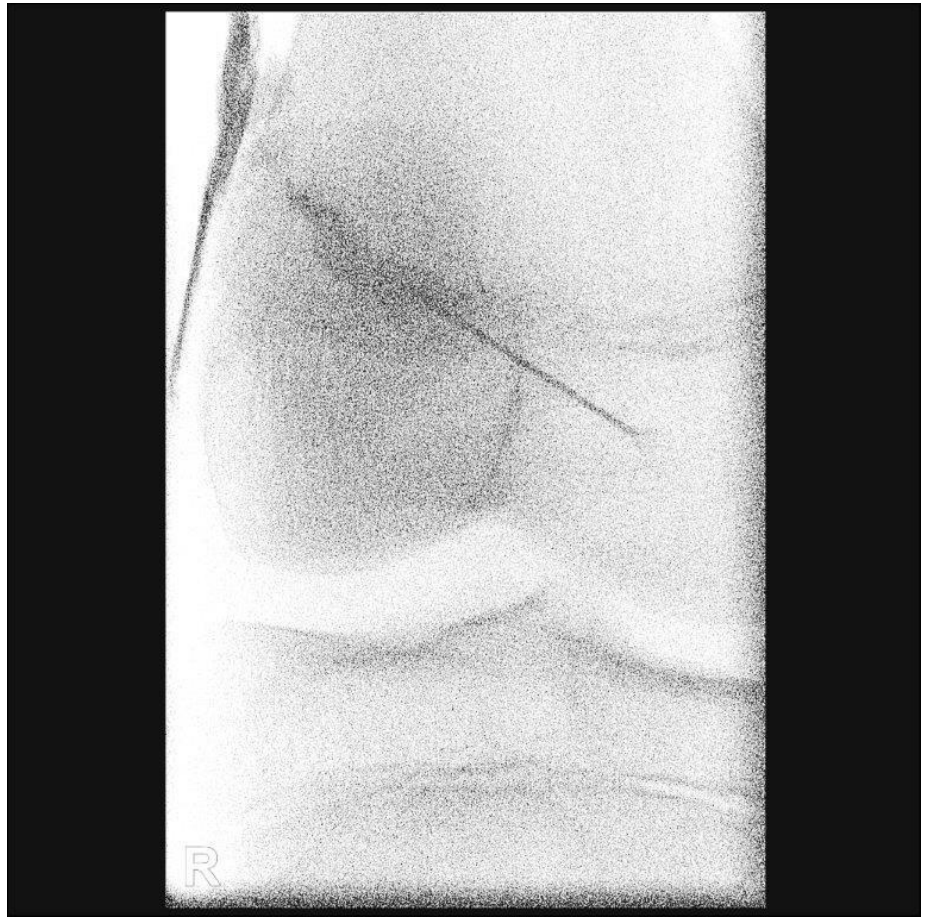


Oligoarthritis

- Laboratory was contacted and ANA and RF were requested
    - ANA titre 1:640, Speckled pattern
    - RF negative
- Arrangement was made for intra-articular steroid injection under GA
- Naproxen was prescribed 10mg/kg B.D. p.o.
- Urgent referral made to ophthalmologist

Oligoarthritis

- Progress notes:
    - The joint was successfully injected after aspirating 25 mls of straw color fluid
    - Triamcinolone hexacetonide 1mg/kg used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Synovial fluid analysis

Body Fluid 1 M/C/S

Specimen/Site	Synovial Fluid (Right Knee)	
Volume	4	mL
Appearance	Slightly blood stained	
Viscosity	Low	
Leucocytes	4927	x10*6 /L
Erythrocytes	12000	x10*6 /L
Neutrophils	27	%
Lymphocytes	66	%
Monocytes	7	%
Eosinophils	<1	%
Gram stain comment	No bacteria seen	
Other	No crystals seen	
Culture	No growth	

Comments

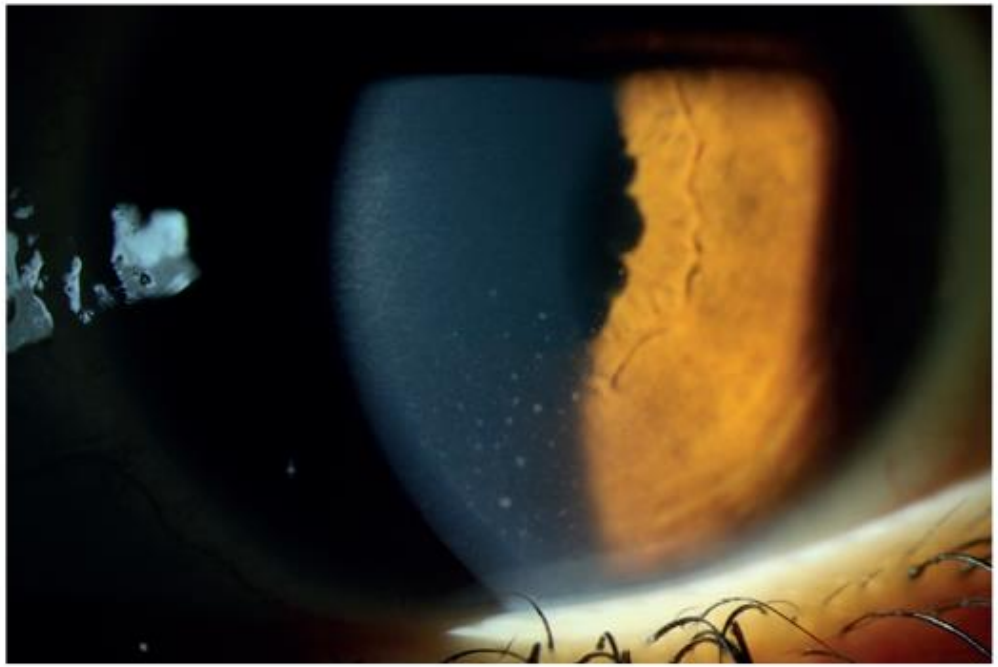
Interpretive Ranges for Leucocytes in Synovial Fluid

Normal	< 200 x 10*6 /L
Non-inflammatory	200 - 2000 x 10*6 /L
Inflammatory	> 2000 x 10*6 /L

BB

- There was dramatic improvement post injection and active and passive physiotherapy was implemented
- Night time splint was made by OT and orthotist and proved very helpful
- Extension improved to -5 degrees 1 month later
- However, the news at the eye clinic were not as good: In spite of topical steroid drops there was excessive activity in the anterior chamber, as well as increased intra-articular pressure

Keratic precipitate



Oligoarthritis

- Ophthalmologist contacted paediatric rheumatologist to commence MTX.
- This was tried for 6 months with some improvement, but deteriorating inflammation overall.

Therapeutic options for escalating treatment

Infliximab infusion

- Infliximab 6mg/kg given at 0, 2, 6, 14 weeks and 8 weekly from then on.
- Not PBS approved
- Needs hospital admission and iv treatment
- Risk of allergic reactions

Adalimumab subcutaneous injections

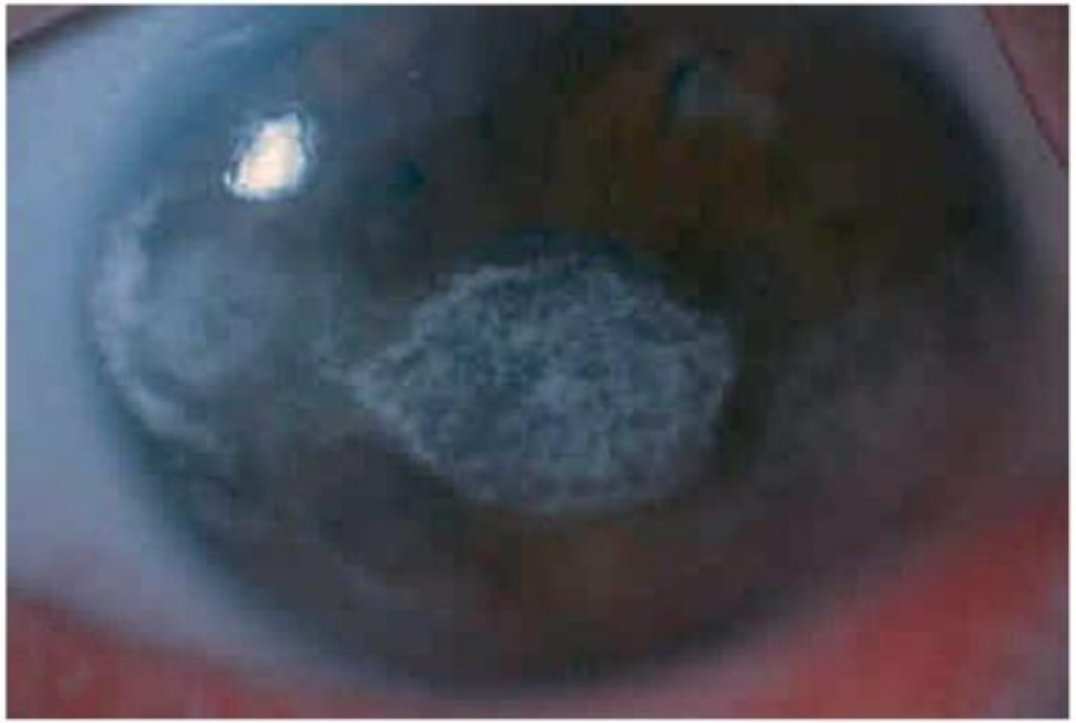
- 10mg (<15kg), 20mg (16-30kg), 40mg (>30kg) every two weeks
- Not PBS approved
- Compassionate access with patient support
- Less risk of allergic reaction

Adalimumab was preferred

- Injection site pain reported but managed with education/Buzzy Bee
- The uveitis completely resolved after 6 months
- 3 monthly follow up continued by the ophthalmologist
- Arthritis did not relapse or extend

Band Keratopathy

Late kerato precipitate



In conclusion:

- Timely referral for paediatric rheumatology assessment when there is no evidence of tumour/trauma/infection
- Think about uveitis early with low threshold to commence systemic low dose methotrexate treatment early under the care of a paediatric rheumatologist
- We need to ask PBAC/Medicare for equitable and timely access to TNF-a blockers or other biologics if necessary to aggressively manage uveitis.