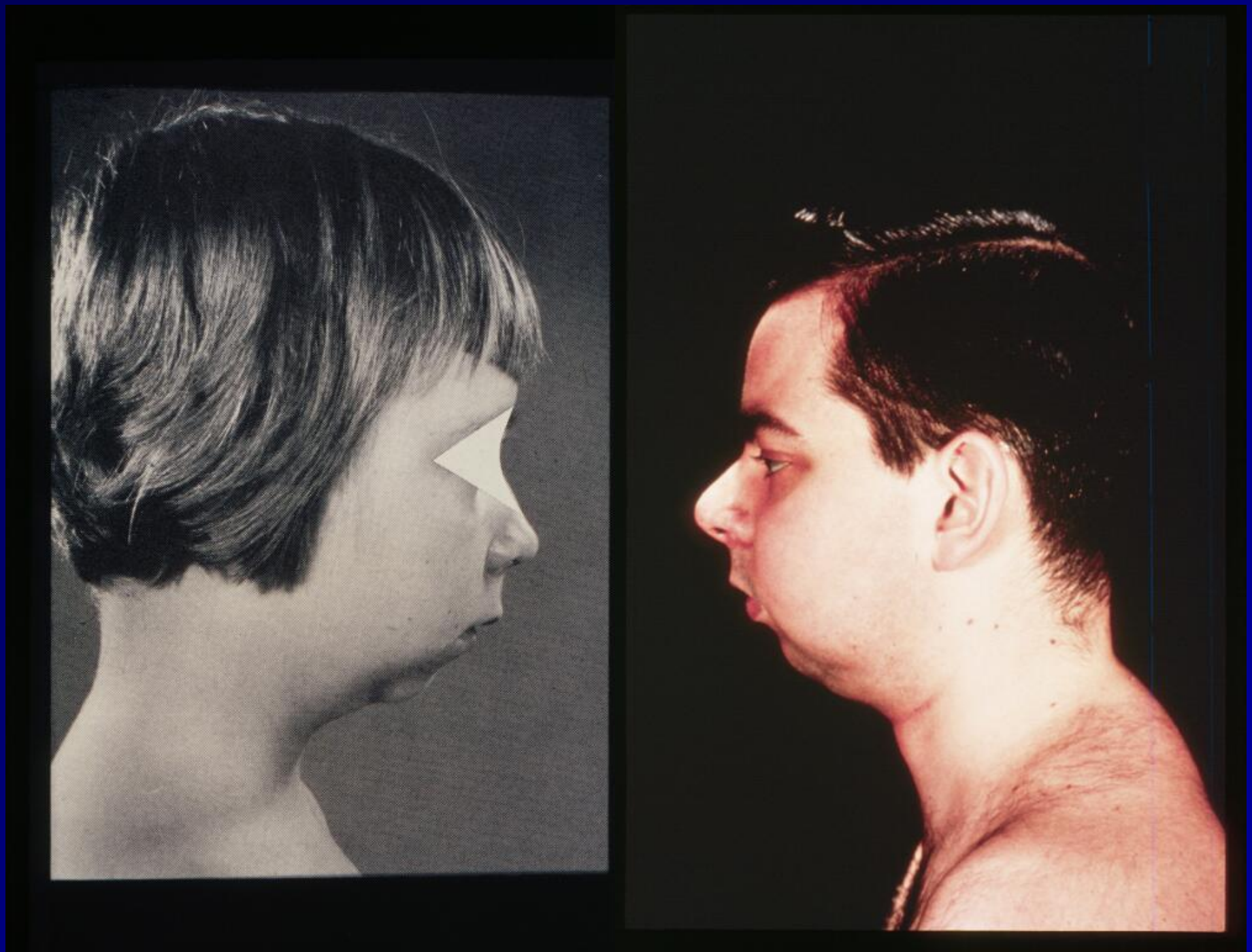
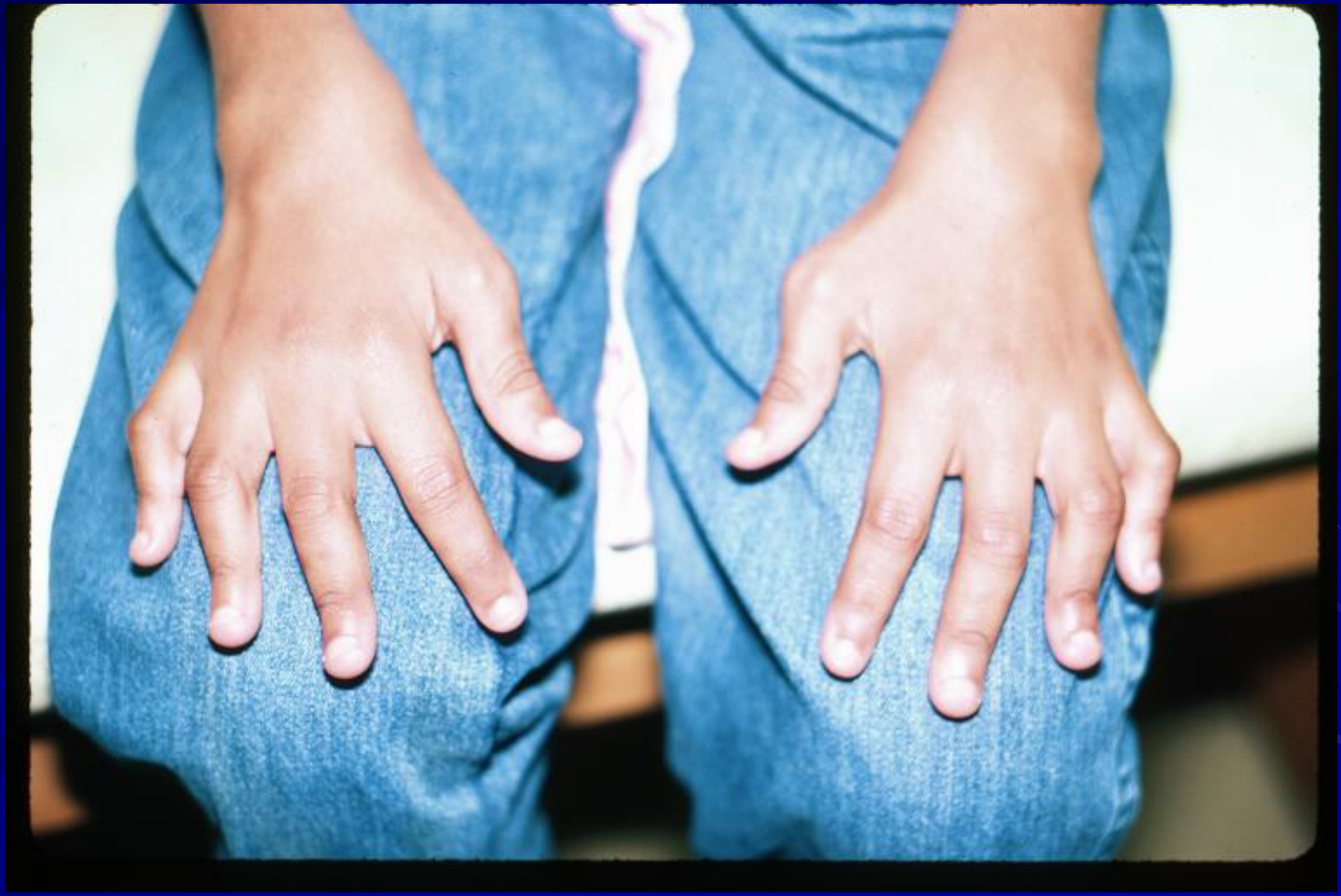
Polyarticular - RF positive

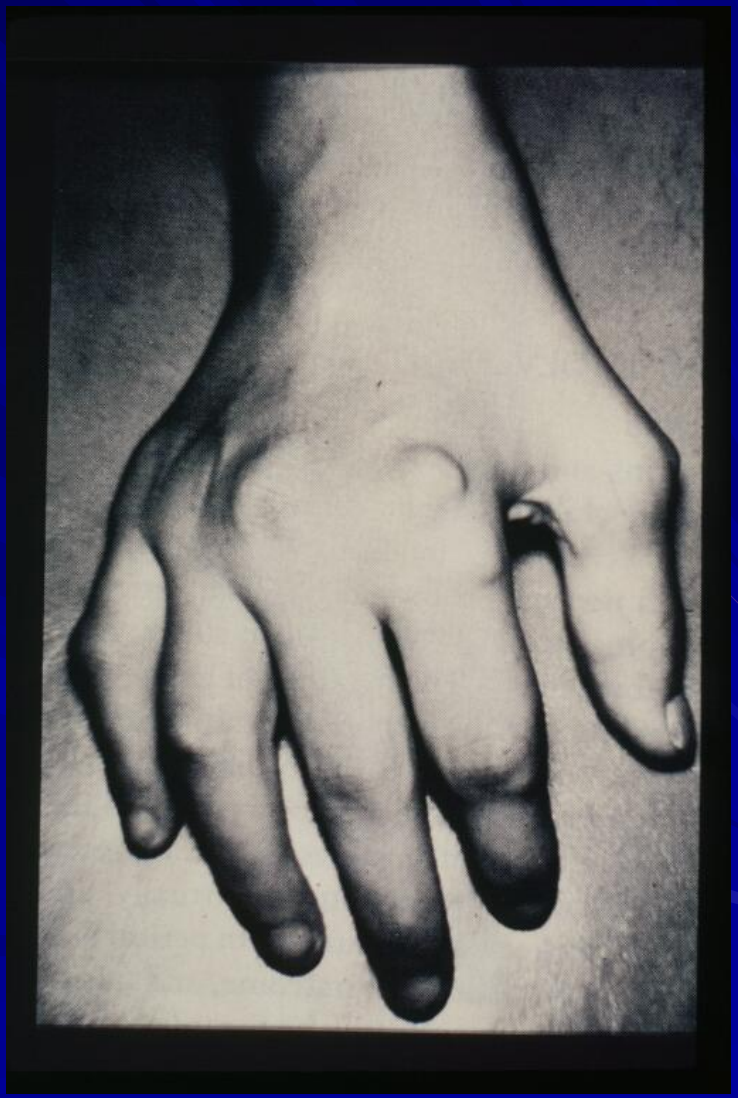
- Arthritis affecting 5 or more joints in the first 6 months of disease.
- Similar to adult RA
- Females with onset in adolescence
- Rheumatoid nodules
- Early onset of erosive synovitis
- Symmetric joint involvement
- Small joints of hands or feet are affected
- TMJ: micronathia
- Cervical spine may be affected





Rheumatoid Nodules

- Occur in 5-10% of children with JIA
- Most frequently on elbow
- Pressure points, digital flexor tendon sheaths, Achilles tendons, bridge of nose in child who wears glasses
- Firm or hard, usually mobile, nontender.
- Solitary or multiple, may change in size, may last months to years.



Oligoarticular JIA

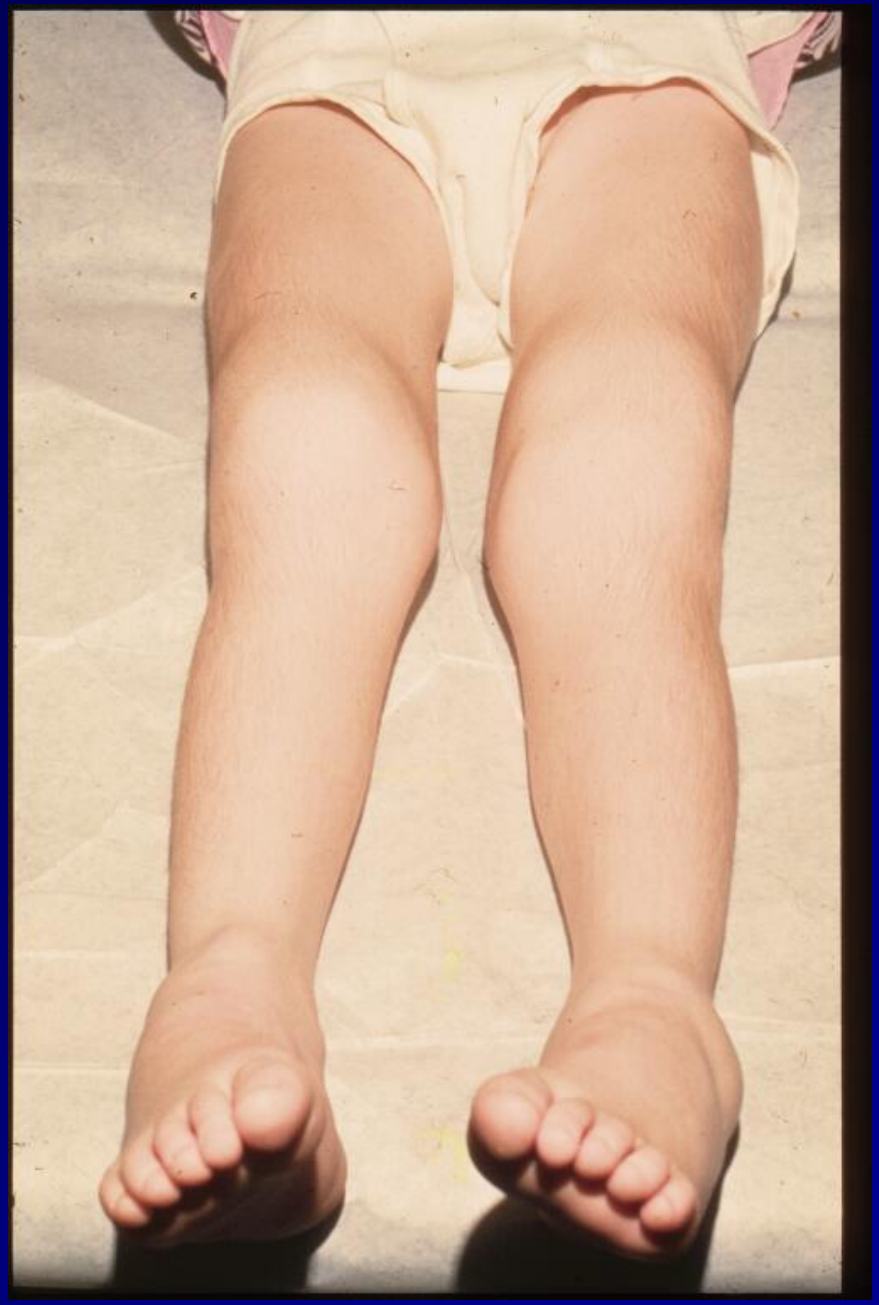
- Arthritis in 1 to 4 joints during the first 6 months of disease
- Girls 1 to 4 years
- Knees, ankles, elbows
- Painless swelling of joints is common
- Uveitis: insidious, subacute
- 15-20% have uveitis

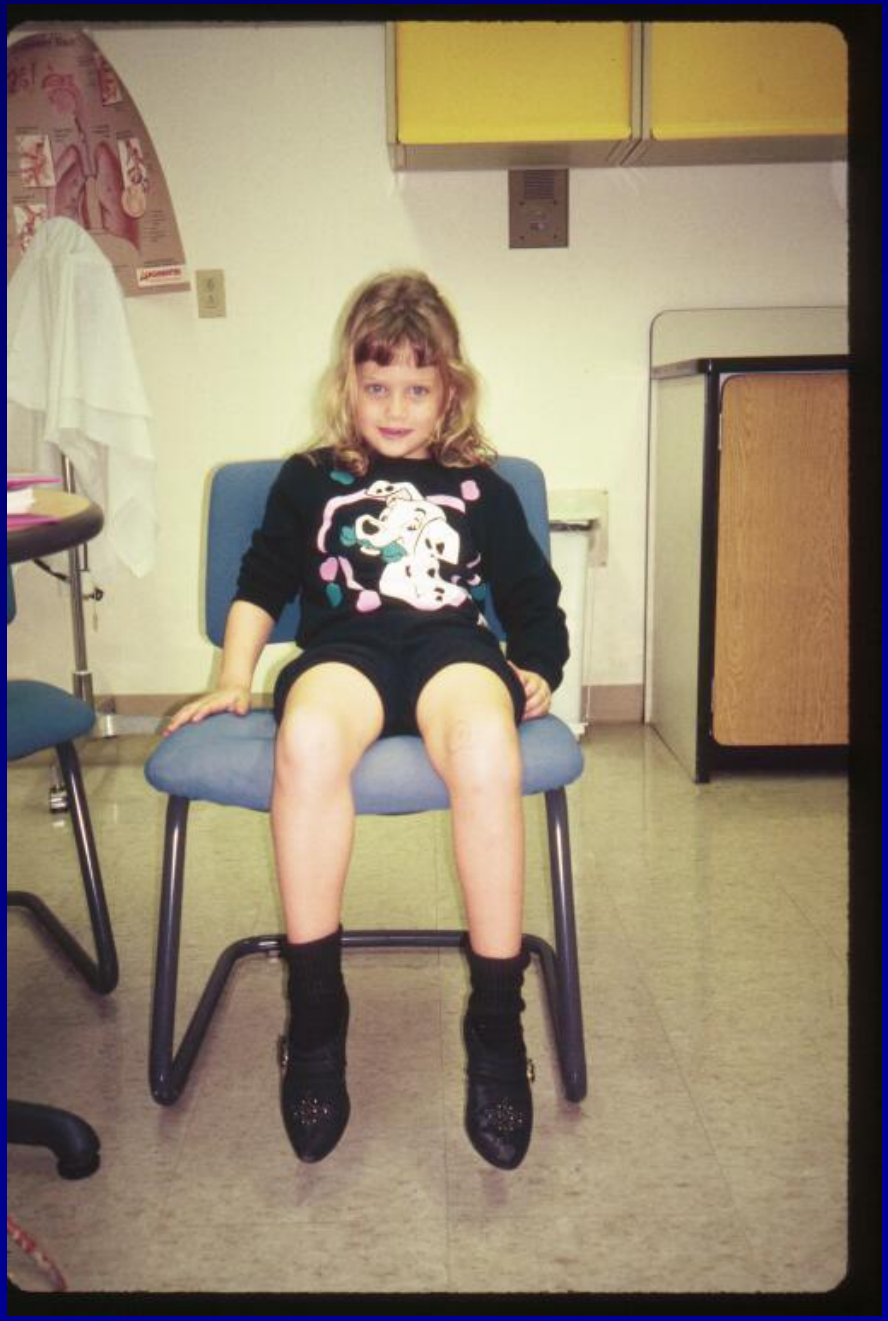
JIA: Oligo – persistent

- No more than 4 joints affected throughout the disease course

JIA: Oligo - extended

- Affects a total of more than 4 joints after the first 6 months of disease.
  At least 1/3 of children with Oligoarticular arthritis fall into this category
  Outcome is more typical of RF+ polyarticular disease





Uveitis in JIA

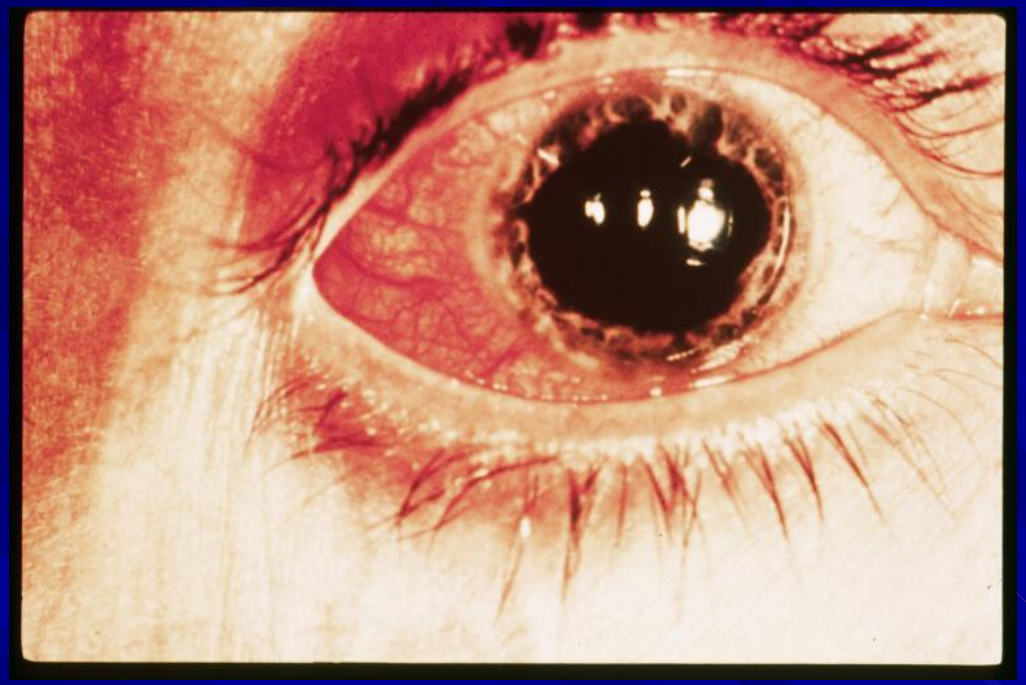
- Usually occurs after onset of arthritis. Highest risk is within 2 years of onset of arthritis. Majority develop eye disease within 5-7 years after onset

- 65% have bilateral involvement, unilateral may progress to bilateral

- Treatment includes topical steroids, SQ Methotrexate, IV Remicade; SQ Humira and
- Enbrel.

Uveitis in JIA

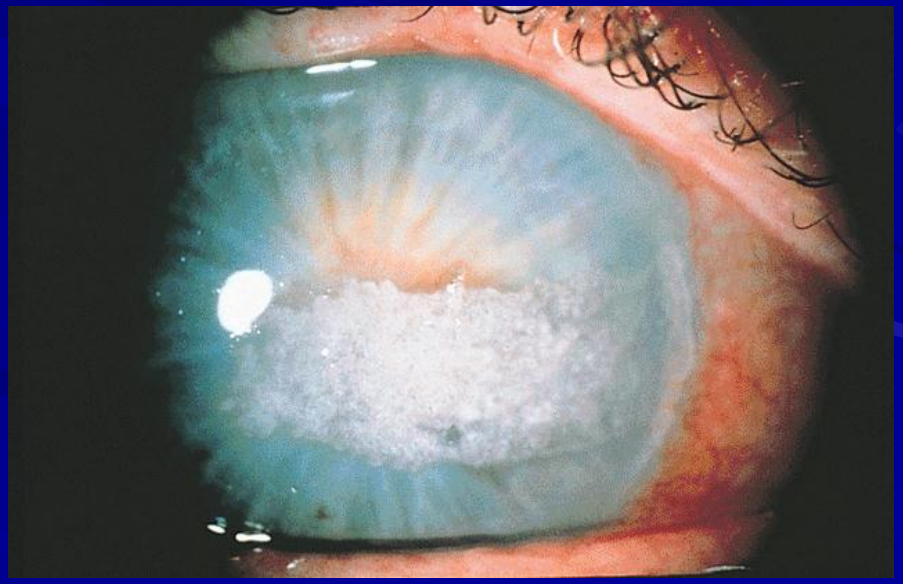
- Intraocular inflammation affects iris and ciliary body
- Usually insidious and may be asymptomatic
- Activity of eye does not parallel joint disease
- Slit lamp exam detects anterior chamber inflammation
- Girls, ANA + and onset before age 7 at higher risk



Prognosis of Uveitis in JIA

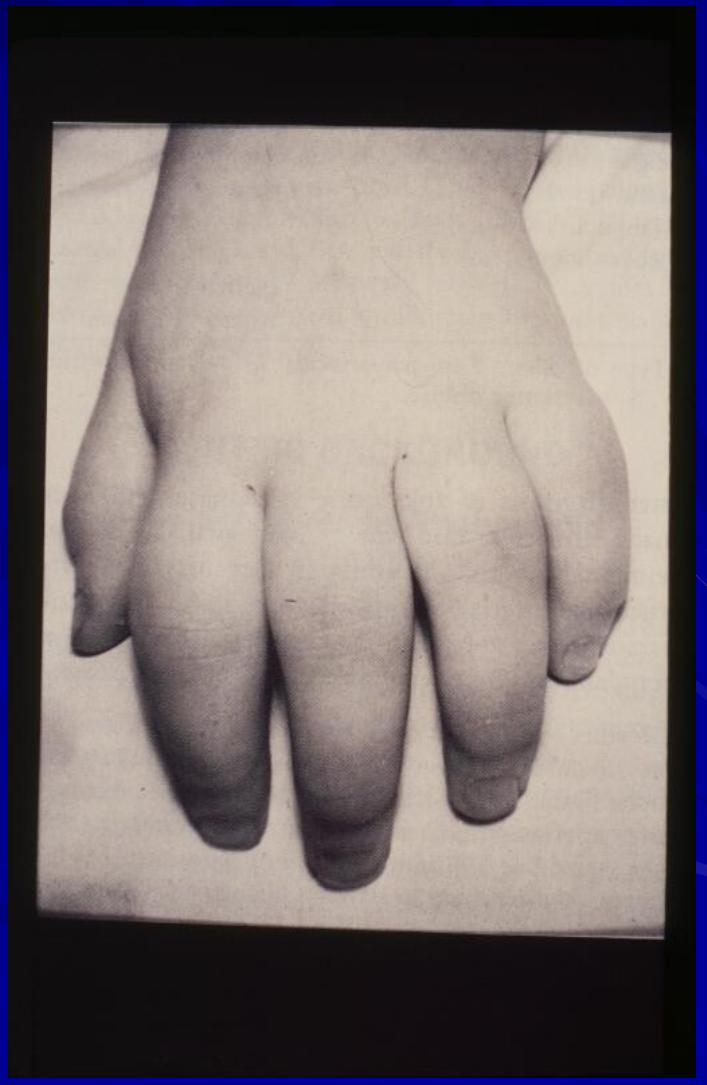
- Very good in 25% of cases
- 25% may require surgery for cataracts and/or glaucoma
- 50% require prolonged treatment for moderate to severe chronic inflammation; however, the prognosis is generally good

Complications: cataracts 20%, glaucoma 20%, band keratopathy 16% (end stage scarring)



JIA: Psoriatic Arthritis

- Arthritis and psoriasis or
- Arthritis with 2 of the following:
  - Dactylitis - sausage like swelling of toe or finger
  - Nail pitting
  - Psoriasis in a first degree relative (parents, siblings)
- Slightly more females
- Symmetrical involving large and small joints



JRA: Spondyloarthropathy
JIA: Enthesitis related arthritis

- Arthritis and enthesitis
- Arthritis or enthesitis with at least 2 of the following:
  - Sacroiliac joint tenderness and/or inflammatory lumbosacral pain
  - Presence of HLA-B27
  - Onset of arthritis in a male after age 6 years
  - Ankylosing spondylitis, Enthesitis Related Arthritis, Sacroiliitis with inflammatory bowel disease, Reiter's syndrome or acute anterior uveitis in a first-degree relative.

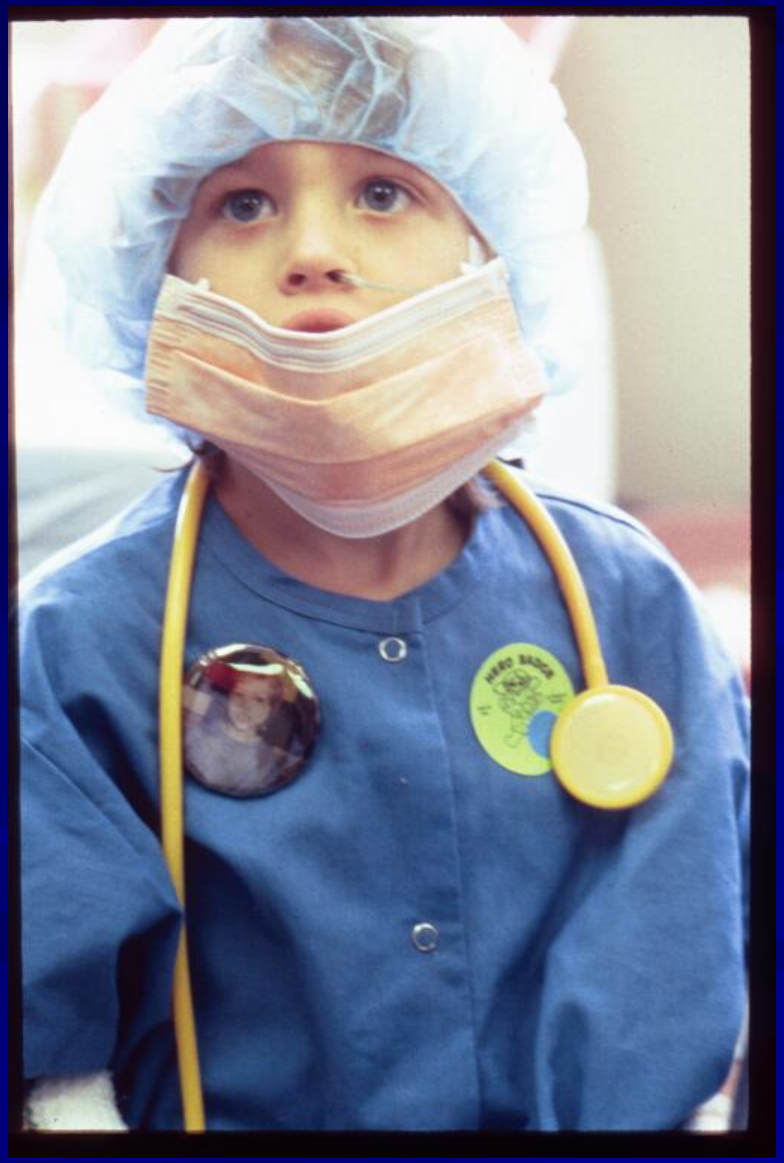
JRA: Spondyloarthropathy
JIA: Enthesitis related arthritis

- Primarily affects boys 8 years and older
- Affects large joints of lower extremities
- Heel pain and Achilles tendonitis
- Sacroiliitis (90% of cases)
- Iritis (20% of cases) generally acute process
- Low grade fevers
- Decreased appetite

PT/OT - Overall goals

- Maintain or restore functional ROM in joints
- Strengthen muscles surrounding affected joints - to enable joints to remain in a functional position
- Assist child to perform activities in ways as close to normal as possible
  - so they do not feel "different" from peers.

Medications



- NSAIDs
- DMARDs:
  Methotrexate, Plaquenil, Sulfasalazine
- Biologic response modifiers
- Glucocorticosteroids
- Miscellaneous

NSAIDS

- FDA approved for pediatric use
  - Aspirin
  - Tolmetin
  - Naproxen
  - Ibuprofen
  - Indomethacin
  - Meloxicam (Mobic)
  - Celebrex

Miscellaneous Treatment

- Thalidomide
- Bone Marrow Transplant

PT/OT - Management in JIA

- Splint fabrication