ADOLESCENT WITH TRIPLE “ITIS”

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HISTORY

- A 14yr old boy, previously well
- Low grade fever
- Redness of eyes
- Dysuria

(Low grade fever, redness of eyes, dysuria) since a week

- Painful swelling of right knee → left knee → left ankle – 5 days

EXAMINATION

- Well nourished
- Bilateral conjunctival congestion+
- Arthritis of left knee and ankle joints+
- Genitalia – small shallow ulcers over glans penis
- No oral ulcers
- Systemic examination was normal

INVESTIGATIONS:

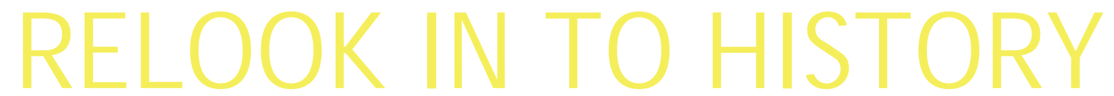
- TLC – 13,800/mm^3
- ESR – 90mm/hr
- CRP – 140mg/L
- Urine microscopy – normal
- ASO titre & RA factor – negative
- ECHO – normal

- Naproxen for arthritis
- Azithromycin – to cover for atypical organisms

- Lid edema, conjunctival congestion
- Antibiotic eye drops

Dermatologist

- Circinate balanitis
- Suggested mycoplasma IgM antibody assay



- H/o loose stools which lasted for 2 days, 4 weeks back.

COURSE IN THE HOSPITAL

- Increased redness & watering of eyes
- Photophobia and corneal haziness
- Corneal specialist consult – Keratitis
- Atropine eye drops + gatifloxacin eye drops

FURTHER WORK UP:

- Eye swab culture – no growth
- Mycoplasma IgM – negative
- HLA B27 (DNA PCR SSP) - POSITIVE

- Keratitis resolved
- Discharged on NSAID

- Arthritis persisted: Rheumatologist consult
  Steroid (1mg/kg/day)

- Arthritis resolved
- ESR - decreasing trend

DISCUSSION:

- HANS REITER in 1916
- Most common in 20-40yrs age
- Inflammatory reaction in a susceptible individual preceded by GI/genitourinary infection
- Classified as a type of seronegative spondyloarthropathy

Third International Workshop diagnostic criteria for reactive arthritis - 1996

Peripheral arthritis

- Predominantly lower limb, asymmetric oligoarthritis

plus

Evidence of preceding infection

- Diarrhea or urethritis in the prior 4 weeks
- No evidence of infection

Exclusion

- Other causes of monoarthritis or oligoarthritis excluded

2 forms

- Post dysenteric
- Post urethritis

Causative organisms

- Shigella flexneri
- Salmonella typhimurium
- Yersinia
- Campylobacter jejuni
- Chlamydia trachomatis
- Mycoplasma
- Ureaplasma urealyticum

CLINICAL MANIFESTATIONS:

- Peripheral arthritis syndrome
  Most commonly involves lower limb joints
- Enthesopathic syndrome
  Heel pain, achillis tendinitis, pain at the tibial tubercle
- Pelvic & axial syndrome
  Sacroiliitis, spondyliitis,
- Genitourinary
  Urethritis, Prostatitis
  Cervicitis, salpingitis
- Eye
  Conjunctivitis, Uveitis
- Skin
  Oral ulcers, CIrcinate balanitis
  Keratoderma blenorrhagica
  Nail involvement, erythema nodosum
- Cardiovascular
  Aortic disease, Conduction defects
- Renal
  Proteinuria, microhematuria, aseptic pyuria

TREATMENT

- Circinate balanitis – topical steroid, keratolytic
- Uveitis – topical/IV steroid, mydriatic
- Arthritis – NSAIDs, Steroids, DMARDs, Anti TNF-a.
- Role of antibiotic – chlamydia

- Acute or self limiting
- Chronic arthritis

HLA B-27

- Not a confirmatory test
- Patients with positive HLA-B27 antigens are more likely to develop chronic or recurrent arthritis, uveitis, aortitis, sacroilitis, and spondylitis

LITERATURE REVIEW

- Indian Pediatrics, 1997, Reiter's syndrome in a 8yr old male child (HLA B27 negative)
- Iran J Allergy Asthma Immunol. 8yr old boy with Reiter's and nail involvement
- Cornea. August 2011. Keratitis in reactive arthritis – 10 yr old girl.

- Dr. Ramkumar, Consultant dermatologist.
- Dr. Ramprakash, Consultant Ophthalmologist.
- Dr. Srinivas K Rao, Cornea specialist.