PAEDIATRIC DERMATOLOGY

A RARE CASE OF CIRCINATE BALANITIS IN A CHILD WITH REITER'S SYNDROME(REACTIVE ARTHRITIS}

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A 9 year Indian boy presented with cough, fever, bilateral conjunctivitis, polyarthritis and psoriasiform rash on his glans penis. No gastrointestinal or urinary symptoms.
Eye examination revealed keratitis. Investigations excluded infective and autoimmune causes. Radiological imaging of affected joints were negative. Inflammatory markers were raised and mild urethritis with sterile pyuria. Human leukocyte antigen subtypes B27 (HLAB27) positive.

Diagnosis: Reactive arthritis (classic triad- arthritis, conjunctivitis and urethritis).

Treatment: bed-rest, cloxacillin, ceftriaxone, indomethacin, prednisolone. Fever and circinate balanitis resolved after one week of topical 0.025% betamethasone valerate/3% clioquinol cream. Polyarthritis improved. Keratitis improved with topical eye antibiotics and steroids.
Reactive arthritis (ReA) or Reiter's Syndrome is rarely seen in children, more in males. May present with preceding history of infection usually gastrointestinal (e.g. dysentery, salmonella, shigella) or venereal (e.g. chlamydia, syphilis, AIDs). The former more common in children. Circinate balanitis is a known mucocutaneous manifestation especially in adults but uncommon in pediatric population.
The classic triad, rarely evident on presentation, can take variable time (days to years) to manifest. Mucocutaneous lesions (circinate balanitis, keratoma blenorrhagicum, oral and nail changes) and visceral (e.g. lungs, cardiac, kidney, spleen) can be involved.
Differential diagnosis include venereal diseases (especially in presence of positive sexual contact history), candidiasis, as well as non- infective causes like psoriasis, atopic or contact dermatitis and fixed drug eruption (if there is suggestive medication history and recurrence of rash).

Familial disposition: strongly associated with positive HLAB27 and ankylosing spondylosis.
Treatment includes bed-rest, non-steroid anti-inflammatory drugs, topical or oral steroids. Mucosal lesions can also be treated with combination of keratolytic agents and topical calcineurin inhibitors (e.g. tacrolimus).
If recurrent, persistent or refractory ReA, use of cytotoxics (methotrexate, azathioprine),

infliximab may be considered. Chronic arthritic changes can lead to progressive disability with long term sequelae. Multidisciplinary management may be needed as indicated.