

HLA-B27 Associations

HLA-B27, human leukocyte antigen B27, is a class I surface antigen associated with seronegative arthropathies (no rheumatoid factor in serum). The diseases psoriatic arthritis, ankylosing spondylitis, inflammatory bowel disease and reactive arthritis are all associated with positive HLA-B27 status.



PLAY PICMONIC

Associations

PAIR Acronym

Pair of bombers

The acronym P-A-I-R can be used to represent the associated arthropathies of psoriatic arthritis, ankylosing spondylitis, irritable bowel disease and reactive arthritis.

Psoriatic Arthritis

Sorcerer King-Arthur

Psoriatic arthritis is defined as joint pain and stiffness with psoriatic involvement. The psoriasis typically shows up in a patchy asymmetric pattern. Other associations include a pencil-in-cup deformity of joints seen on x-ray and sausage fingers.

Ankylosing Spondylitis

Anchor Spine

Ankylosing spondylitis is characterized as chronic inflammation of the spine and sacroiliac joints. Patients complain of a stiff spine and ultimately, fusion occurs and a "bamboo spine" is seen on x-ray. Uveitis and aortic regurgitation are pathologies associated with this disease.

Inflammatory Bowel Disease

Bowel-bowl in Flames

Crohn's disease and ankylosing spondylitis often involve peripheral arthritis and are associated with HLA-B27.

Reactive Arthritis

Writing King-Arthur

Reactive arthritis is another HLA-B27 positive arthropathy, which is characterized by the triad of conjunctivitis, urethritis and arthritis. This can be remembered by the phrase "Can't see, can't pee, can't bend my knee."