CLINICAL FEATURES OF ACUTE RHEUMATIC FEVER

Acute Rheumatic fever occurs after a precipitating Group A beta hemolytic streptococcal infection. This streptococcal infection may cause sore throat in some patients, but in most patients it is subclinical and there will be no history of sore throat. The most common clinical features are polyarthritis and carditis.

1. Carditis

Rheumatic fever causes pancarditis, that is, it affects endocardium, myocardium and pericardium.

Pericarditis causes chest pain and pericardial friction rub.

Myocarditis causes tachycardia, prolonged PR interval, soft S1 and Carey Coombs murmur. This is a functional, apical, mid-diastolic murmur due to mitral valvulitis.

Endocarditis leads to valvular damage. Valvular damage is the hallmark of rheumatic carditis. The most common valve that is affected is the mitral valve, in some patients both mitral and aortic valve is affected. In acute carditis, mitral regurgitation is the most common murmur heard, sometimes accompanied by aortic regurgitation.

Upto 60% patients with acute rheumatic fever will go on to chronic Rheumatic heart disease. Due to recurrent attacks of acute rheumatic fever, valve leaflets become thickened, there is scarring and calcification leading to valvular stenosis. The most common valvular lesion in Rheumatic heart disease is mitral stenosis, followed by mitral regurgitation. Aortic stenosis and aortic regurgitation are also seen.

As rheumatic heart disease progresses, patients may develop cardiac failure. Some patients are asymptomatic throughout their lives and directly present with mitral stenosis with congestive cardiac failure.

2. Joint involvement

The most common form of joint involvement in ARF is Migratory polyarthritis. Most common joints involved are large joints like knees, ankles, elbows, wrists. The joints are inflammed - red, hot, swollen and tender. Joint involvement is asymmetric and migratory in nature, that is the arthritis occurs in one joint, completely resolves and then occurs in another joint. The joint pain is severe and disabling and anti-inflammatory medication is required for relief.

Some patients may have only arthralgia, that is joint pain without inflammation. Arthralgia also affects large joints and is migratory in nature.

3. Chorea

The chorea in Acute Rheumatic fever is also called Sydenham's chorea or St. Vitus Dance.

It is a late manifestation of rheumatic fever.