

Chronic post-rheumatic fever arthropathy

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A 36-year-old female presented with deformities of the hands and feet for the last 10 years. She had a history of acute rheumatic fever at the age of 15 years. Clinical examination revealed painless reducible deformities of her hands and feet, characteristic of Jaccoud's arthropathy (Figure 1a, Video 1). Laboratory investigations were negative for acute phase reactants, rheumatoid factor, and antinuclear antibodies. Radiography of both hands showed ulnar deviation of the fifth digit and absence of bony erosions (Figure 1b). Echocardiography was consistent with rheumatic mitral stenosis (Figure 1c-d, Video 2). The mitral valve orifice area measured 1.4 cm². Jaccoud's arthropathy is typically observed in rheumatic fever, but it has also been described in systemic lupus erythematosus and other connective tissue disorders (1, 2). The deformities are reducible and are primarily caused by soft tissue abnormalities rather than destruction of the joints. Jaccoud's arthropathy is benign and reversible and should be differentiated from fixed deformities of rheumatoid arthritis. The mainstay of treatment includes physiotherapy and the use of orthotic devices. Our patient was referred to physical therapy for muscle strengthening and is on medical therapy for mitral stenosis.

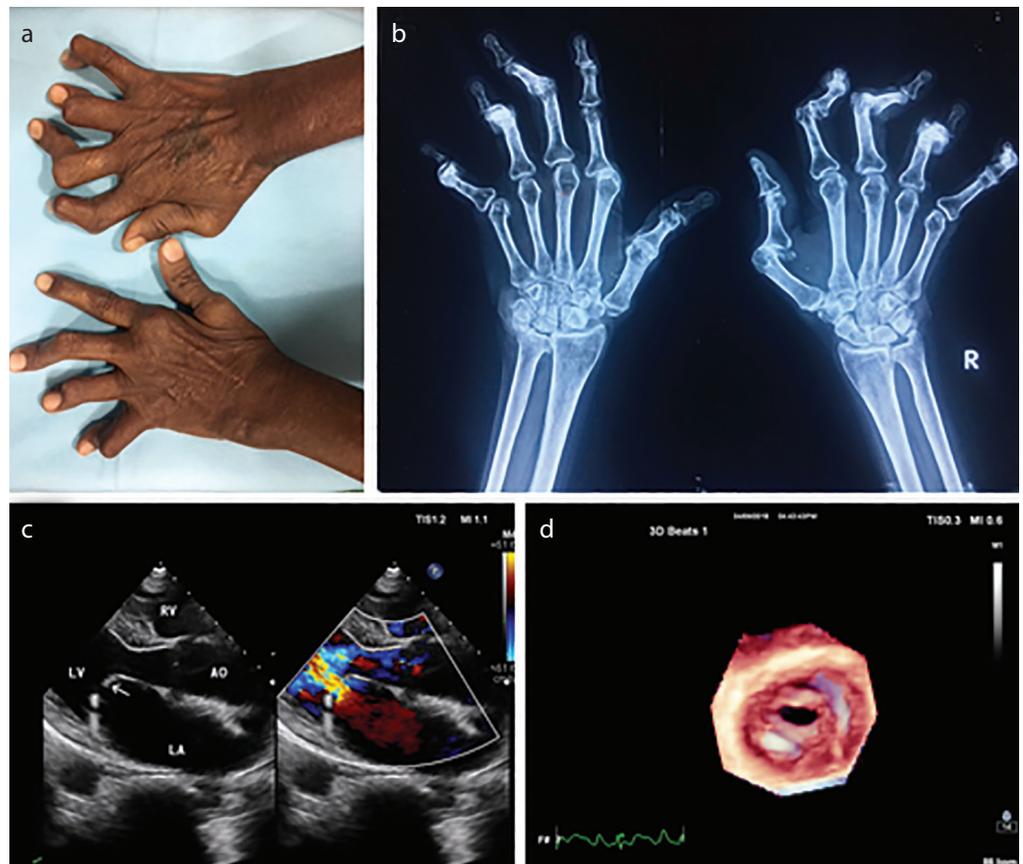


Figure 1. a-d. Photograph of both hands showing flexion deformities at the proximal interphalangeal joints and extension deformities at the distal interphalangeal joints (a). Radiograph showing ulnar deviation of the fifth digit and absence of bony erosions (b). Two-dimensional echocardiography illustrating the “hockey stick” appearance of anterior mitral leaflet in parasternal long axis view (arrowhead) (AO: aorta, LA: left atrium, LV: left ventricle, RV: right ventricle) (c). Three-dimensional echocardiography demonstrating the thickened mitral valve leaflets with fused commissures (fish-mouth appearance) in parasternal short axis view, suggesting rheumatic mitral stenosis. The mitral valve orifice area measured 1.4 cm² (d)

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Video 1. Video illustrating the hand deformities that are reversible. These reducible deformities are characteristic of Jaccoud's arthropathy

Video 2. Three-dimensional echocardiography demonstrating the thickened mitral valve leaflets

with fused commissures (fish-mouth appearance) in parasternal short axis view, suggesting rheumatic mitral stenosis. The mitral valve orifice area measured 1.4 cm²

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