An Obese Lady with Back Pain and Psoriasis

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A 37-year-old obese lady had history of psoriasis for more than 10 years. Three years ago, she suffered from arthritis over bilateral wrists and metacarpophalangeal joints, which subsided with a prolonged course of diclofenac. She was referred to the rheumatology clinic for inflammatory back pain for one year. Her C-reactive protein (CRP) level was 0.4 mg/L, the erythrocyte sedimentation rate (ESR) was 27 mm/hr and HLA-B27 typing was negative. Plain radiograph and magnetic resonance imaging (MRI) of sacroiliac joints showed no sacroiliitis. Spine MRI (T1 + T2 STIR) was performed.

Questions:
1) Which one is the T1 image and which one is T2 STIR image?
2) What are the MRI features?
3) What is the clinical diagnosis?

(answers on page 37)