

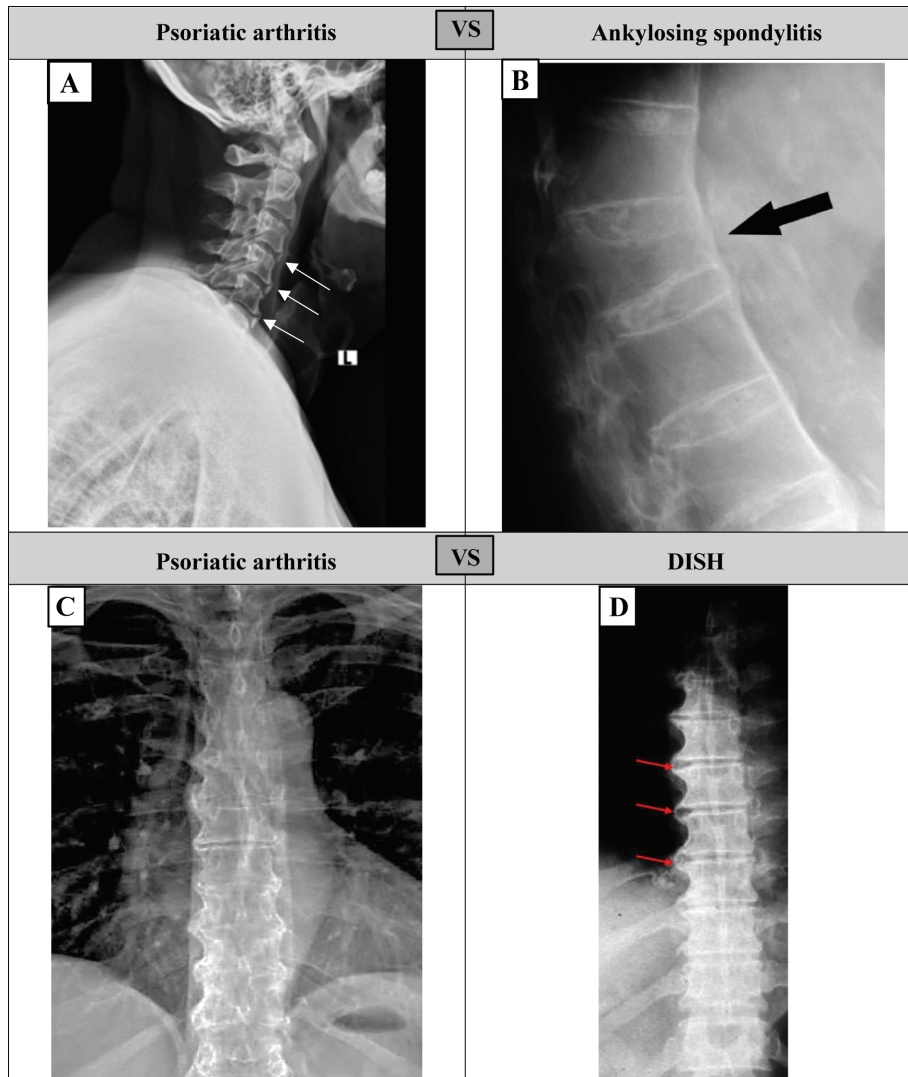
## Images in Medicine

### Axial spondyloarthritis in psoriatic arthritis

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A 53-year-old Caucasian male presented to the outpatient rheumatology clinic with a 12-month history of neck and thoracic spinal pain, associated with progressive difficulty in neck rotation. He reported a prior history of lower back pain with early morning stiffness. His symptoms had increasingly interfered with his ability to work as a motor vehicle mechanic. He had a daughter with psoriasis and recalled experiencing similar rashes during childhood. On clinical examination, cervical spine rotation was reduced to approximately 45 degrees bilaterally. His occiput-to-wall distance was 6 cm (normal < 2 cm), chest expansion was reduced to 3 cm (normal 5.5-7.5 cm), and the modified Schober's test measured 14 cm (normal > 20 cm). Flexion, Abduction, External Rotation test (FABER's) test was negative, and HLA-B27 testing was negative. Plain radiographs of the cervical spine demonstrated non-marginal ("jug-handle") syndesmophytes, characteristic of psoriatic arthritis (Figure A, white arrows). These differ from the thinner, more vertically oriented marginal syndesmophytes typically seen in

ankylosing spondylitis (Figure B, black arrow). Radiographs of the thoracic spine showed similar changes (Figure C), which may be confused with diffuse idiopathic skeletal hyperostosis (DISH). Differentiating non-marginal syndesmophytes from DISH can be challenging; however, the presence of contiguous right-sided mid-thoracic ossification is more typical of DISH (Figure D, red arrows). It is important to note that these conditions may coexist, as both are frequently associated with metabolic syndrome. The patient was commenced on high-dose non-steroidal anti-inflammatory drugs, muscle relaxants, and vitamin D supplementation, alongside a structured physiotherapy-led exercise programme. At the three-month follow-up, he reported significant symptomatic improvement. Cervical spine rotation improved to at least 60 degrees bilaterally, occiput-to-wall distance decreased to 5 cm, and early morning stiffness improved from over three hours to approximately 30 minutes. He returned to work and reported improved functional capacity and reduced pain.

