

## Adolescent gymnast with persistent back pain

### Question

A 13-year-old gymnast girl was admitted to the emergency department with a 1-month history of low back pain and poor response to nonsteroidal anti-inflammatory drugs (NSAIDs). Pain



**Fig 1** CT scan with L3 isthmic bilateral spondylolysis.

was diurnal and worsened with physical activities. No trauma or fever was reported. On physical examination, bilateral pain was elicited at palpation of L3 vertebra and at the surrounding paravertebral muscles. Flexion, extension and lateral movements of the vertebral spine increased pain and were limited. An antero-posterior x-ray of the spine was negative. A magnetic resonance imaging (MRI) of the lumbar spine showed hyperintensity of left transverse process and lower articular process of L3, with concomitant paravertebral muscle oedema. A subsequent computed tomography (CT) was diagnostic (Fig. 1). What is the diagnosis? (Answer on page 1542)