Bilateral congenital cervical spondylolysis

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A 5-month-old boy with fever underwent neck radiography that incidentally showed posterior element defects at C4 (Fig. 1, arrows). He had no history of trauma. CT scan to evaluate the retropharyngeal soft tissues confirmed bilateral clefts at the pedicolaminar junction (Fig. 2, arrows). Sclerotic margins suggest a congenital rather than traumatic etiology.

Congenital cervical spondylolysis, an embryologic developmental defect, occurs most commonly at C6. The overall frequency is unknown, and most cases are detected incidentally. Well-corticated margins differentiate congeni-

tal spondylolysis from acute fracture. Unlike congenitally absent pedicle, there is no transverse process dysplasia or apparent neural foraminal enlargement [1].

Fig. 1 Lateral neck radiograph

Fig. 2 Axial CT image at C4

If the cervical spine is stable on lateral flexion and extension radiographs, congenital spondylolysis can be managed conservatively. Otherwise surgical treatment, such as anterior spinal fusion, might be warranted [2].

References

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