Title:

A case of bilateral cervical spondylolysis at the sixth cervical vertebra and review of literature and its surgical approach

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Abstract:

Objective:

To describe a case of bilateral spondylolysis at the sixth cervical vertebra (C6) of a Chinese female and to review the literature for the etiology and the surgical treatment of cervical spondylolysis.

Method:

A 63 years-old Chinese female presented with neck pain and finger numbness for 2 years.

Plain radiographs showed a radiolucent defect of the articular pillar and cleft of spinous process of C6. Computer tomography showed a well corticated discontinuity of bilateral C6 laminae and confirmed the diagnosis of cervical spondylolysis. A literature review of the cases with bilateral cervical spondylolysis at C6 treated surgically is undertaken.

Result:

The patient’s radiological images were reviewed and was advised for an anterior cervical discectomy with interbody and anterior plate instrumentation at the sixth/ seventh cervical vertebra. C6 vertebra was noted to be unique in its anatomy which may post a vulnerable site for trauma and stress fracture, leading to cervical spondylolysis.

Conclusion:

This case suggests that a systematic evaluation of symptoms, associated abnormalities, and the presence of instability in patients with bilateral cervical spondylolysis is important in formulating an optimal treatment plan for the patient. We also advocate early surgical approach in an unstable and symptomatic patient suffering from bilateral cervical spondylolysis.