Cervical spondylolysis in a judo player: a case report and biomechanical analysis

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Dear Editor,

I read with great interest the recent case report by Dr. Sasa et al. [1] regarding cervical spondylolysis in a judo player. The report was worthy of attention as it demonstrates the biomechanics of the cervical spine with spondylolysis at C6.

Although they insist that no case reports of cervical spondylolysis among athletes have been reported; Amin et al. [2] reported C6 spondylolysis and spondylolisthesis secondary to bilateral stress fractures in a 16-year-old baseball player in 2006.

The exact etiology of cervical spondylolysis is still debateable. Several theories have been proposed, including congenital anomaly, microtrauma, and posttraumatic non-union with pseudoarthrosis [3]. Many authors believe the anomaly is congenital or due to faulty ossification within the single ossification center of the articular mass. With the reports by Amin et al. [2] and Sasa et al. [1] it has become more apparent that microtrauma or stress fracture is one of the causes of cervical spondylolysis.

It is interesting that the most frequent level of congenital cervical spondylolysis is C6, which is the same level reported by Amin et al. and Sasa et al. in adolescent athletes [1, 2]. Therefore, it is meaningful to determine whether there is a preponderance of cervical spondylolysis at the C6 level in athletes or individuals who have repetitive stress due to occupation.

References

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