

Hangman's fracture: a clinical review based on surgical treatment of 15 cases.

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Introduction: This is a retrospective analysis of cases with hangman's fracture. The subject of 'hangman's fracture' has been elaborately evaluated in the literature.

Aims and objectives: The authors propose an alternative format of surgical treatment that is based on modification of existing classification schemes.

Materials and methods: During the period 2015 to March 2020, 15 patients having hangman's fracture were identified and were surgically treated. The clinical condition was classified on the basis of American Spinal Injury Association scale (ASIA scale) and VAS parameters. The patients were classified into 4 groups depending on the presence (or absence) of atlantoaxial and/or C2-3 instability. Surgical decisions were guided by the proposed classification. Clinical evaluation and dynamic CT scan were done at follow-up visits.

Results: During the average follow-up of 26 months, all patients are essentially asymptomatic. There was marginal restriction of extent of neck movements in all cases. There was solid bone fusion in all cases.

Conclusion: The proposed novel classification scheme based on the presence of atlantoaxial and C2-3 instability assisted in directing the treatment strategy of hangman's fracture.

Keywords: Atlantoaxial instability; Hangman's fracture; Spondylolisthesis.

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