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Subaxial Cervical Spine Trauma: Evaluation and Surgical Decision-Making

Study Design Literature review.

Objective To discuss the evaluation and management of subaxial cervical spine trauma (C3–7).

Methods A literature review of the main imaging modalities, classification systems, and nonsurgical and surgical treatment performed.

Results Computed tomography and reconstructions allow for accurate radiologic identification of subaxial cervical spine trauma in most cases. Magnetic resonance imaging can be utilized to evaluate the stabilizing discoligamentous complex, the nerves, and the spinal cord. The Subaxial Injury Classification (SLIC) is a new system that aids in injury classification and helps guide the decision-making process of conservative versus surgical treatment. Though promising, the SLIC system requires further validation. When the decision for surgical treatment is made, early decompression (less than 24 hours) has been associated with better neurologic recovery. Surgical treatment should be individualized based on the injury characteristics and surgeon's preferences.

Conclusions The current state of subaxial cervical spine trauma is one of great progress. However, many questions remain unanswered. We need to continue to account for the individual patient, surgeon, and hospital circumstances that effect decision making and care.

下頸椎創傷：評估與手術決策

研究設計 文獻回顧

目的 討論下頸椎創傷（C3-7）的評估和治理。

方法 主要的成像方式，分類系統，非手術和手術治療的文獻回顧。

結果 在大多數下頸椎創傷病例中，電腦掃描和重建允許準確的放射學鑑別。磁力共振成像可用於評估穩定的椎間盤韌帶複合體，神經和脊髓。下頸椎損傷分類（SLIC）是一個新的系統，有助於損傷的分類，並幫助引導保守與手術治療的決策過程。雖然很有保證，SLIC 系統仍需要進一步驗證。當作出進行手術治療的決定，早期減壓（少於 24 小時）已被證明與更好的神經功能恢復有關。手術治療應根據個別的損傷特性及外科醫生的選擇而因人而異。

結論 當前的狀態是下頸椎創傷是很大的進步之一。然而，許多問題仍然沒有答案。我們仍需繼續解釋個別病人，醫生和醫院的情況而影響的決策和治理。