Spinal gunshot wound

The incidence of violent crimes has risen over the past decade. With it, gunshot injuries have become increasingly more common in the civilian population. Among the most devastating injuries are gunshot wounds to the spine.

If a patient arrives with an intact neurologic examination despite gunshot wound or stab wounds to the neck, the incidence of a cervical spine injury that requires a therapeutic intervention is minute. As a result, in a neurologically intact and examinable patient, a cervical collar should be immediately removed to facilitate the remaining components of the diagnostic evaluation [1].

Treatment of gunshot spine fractures differs from other mechanisms. Fractures are usually inherently stable and rarely require stabilization. In neurologically intact patients, there are few indications for surgery. Evidence of acute lead intoxication, an intracanal copper bullet or new onset neurologic deficit can justify operative decompression and/or bullet removal. Overzealous laminectomy can destabilize the spine and lead to late postoperative deformity. For complete and incomplete neural deficits at the cervical and thoracic levels, operative decompression is of little benefit and can lead to higher complication rates than nonsurgically managed patients. With gunshots to the T12 to L5 levels, better motor recovery has been reported after intracanal bullet removal versus nonoperative treatment. The use of steroids for gunshot paralysis has not improved the neurologic outcome and has resulted in a greater frequency of nonspinal complications. Although numerous recommendations exist, 7 to 14 days of broad-spectrum antibiosis has lead to the lowest rates of infection after transcolonic gunshots to the spine [2].

Publications

Treatment of Gunshot Wounds to the Spine during the Late 19th Century [3].

1)
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2)
Bono CM, Heary RF. Gunshot wounds to the spine. Spine J. 2004 Mar-Apr;4(2):230-40. Review. PubMed PMID: 15016402.
3)
Protas M, Schumacher M, Iwanaga J, Yilmaz E, Oskouian RJ, Tubbs RS. Treatment of Gunshot Wounds to the Spine during the Late 19(th) Century. World Neurosurg. 2018 May 7. pii: S1878-8750(18)30918-5. doi: 10.1016/j.wneu.2018.04.198. [Epub ahead of print] Review. PubMed PMID: 29747019.