

Fall-Related Cervical Spine Injury

- [An Overview of Spinal Injuries due to Dive or Fall into Shallow Water: Our Long-Term, Double-Center Experience from the Aegean Coast](#)
- [Epidemiology and clinical outcomes of spinal cord injuries at a level II trauma centre in Nigeria: a longitudinal five year study](#)
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A retrospective study was carried out using data extracted from the medical files of 39 patients (3 females and 36 males) who were treated surgically (n = 29) or conservatively (n = 10). Demographics, clinical features, operative data, American Spine Injury Association (ASIA) impairment scales, and Karnofsky Performance Status (KPS) results were noted.

Results: The average age of our series (n = 39) was 31.59 ± 14.80 (range, 14 to 92) years. The vast majority of patients (n = 34, 87.2%) presented with isolated cervical trauma. At initial admission, neurological deficits were diagnosed in 22 (56.4%) patients. A single-level cervical involvement was noted in 18 (46.2%) patients, while 21 cases (53.8%) displayed injury involving multiple levels. The levels of cervical injury were C5 (n = 16, 41%), C6 (n = 11, 28.2%), C7 (n = 6, 15.4%), C1 (n = 5, 12.8%), and C4 (n = 1, 2.6%). A total of 22 patients had neurological deficits at admission. Surgery was performed using anterior (n = 21, 72.4%), posterior (n = 7, 24.1%), and combined anterior and posterior (n = 1, 3.4%) routes. Nine patients (23.1%) exhibited improvement in their neurological deficits. There were significant improvements in both the ASIA impairment scale and KPS results after treatment.

Conclusion: Our data indicated that dive- or fall-related cervical spinal injuries are associated with profound morbidity. Reinforcement of primary prevention, identification of target population, and increased awareness on this topic are the key steps to minimize the frequency and severity of complications and to optimize therapeutic outcomes ¹⁾.

Case reports from the HGUA

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A 59-year-old male presented a [accidental fall](#), accompanied by occipital trauma and significant neurological symptoms. Imaging revealed multiple cervical fractures, [subluxation](#), and foraminal stenosis. Surgical intervention with ACDF was performed, leading to significant clinical improvement.

This case highlights the importance of prompt surgical intervention in traumatic cervical spine injuries

and demonstrates the effectiveness of ACDF in managing complex cervical fractures.

Age: 59 years Gender: Male Medical History: Active smoker, poorly controlled [Diabetes Mellitus](#) Type 2, dyslipidemia, chronic low back pain.

Clinical Presentation:

The patient presented to the emergency department following a traumatic fall. He experienced severe [cervical pain](#) and occipital trauma. Symptoms included:

Bilateral [brachialgia](#), predominantly on the right side, with [tingling](#) sensations in fingers I-III of the right hand

Diagnostic Evaluation:

Physical Examination: Moderate pain (4/10).

CT Cervical Spine: Multiple fractures in C3-C7 [spinous processes](#) and C7 vertebral body; posterior subluxation at C6-C7 facet joints; foraminal stenosis at C6 and C7.



MRI Cervical Spine: Loss of cervical lordosis, multiple vertebral fractures, disc degenerative changes, no spinal cord compression.

Postoperative Imaging:



RX Cervical Spine: Proper placement of the fusion system.

CT Cervical Spine: Correct vertebral alignment; persistent multifragmentary fractures and subluxation at C6-C7; no significant canal stenosis. Surgical Intervention:

The patient underwent ACDF C6-C7. The procedure included:

Microdiscectomy Insertion of an [cervical interbody stand-alone cage](#) Placement of an [anterior cervical plate](#)

[Antibiotic prophylaxis](#) with [cefazolin](#)

Clinical Course:

Postoperative Recovery: No complications; symptoms improved significantly. No dysphagia or dysphonia. Diabetes and Hypertension Management: Managed by Endocrinology and Nephrology respectively. Mobility: Autonomous ambulation with no fever or infection signs at the surgical site. Follow-Up Imaging: Confirmed adequate alignment and fusion system placement. Discharge Plan:

Medications:

[Paracetamol](#) 1000 mg: Every 8 hours for 20 days.

[Metamizole](#) 575 mg: Every 8 hours for 20 days.

[Tramadol](#) 50 mg: Dosing tapered over 21 days.

[Enoxaparin](#) 4000 U.I.: Daily for 10 days.

[Diazepam](#) 2.5 mg: Dosing tapered over 21 days.

[Ramipril](#) 5 mg: Daily for 60 days for hypertension.

Postoperative Care:

Relative [rest](#), [soft cervical orthosis](#) usage, daily [wound care](#) with [Betadine](#).

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Yılmaz M, Ikizoglu E, Arslan M, Ozgiray E, Caliskan KE, Erbayraktar RS. An Overview of Spinal Injuries due to Dive or Fall into Shallow Water: Our Long-Term, Double-Center Experience from the Aegean Coast. Emerg Med Int. 2021 Jun 3;2021:9937730. doi: 10.1155/2021/9937730. PMID: 34188959; PMCID: PMC8192199.

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