

# “Acute Management of Cervical Spinal Cord Injury, How Can We Reduce Mortality and Morbidity”

---

## ***Nabil Alageli,***

*MSc. (Trauma Surgery), FRCSEd, DSR, DHG*

*Consultant Orthopaedic & Spine Surgeon, Tripoli Medical Centre, Libya*

The management of an acutely injured spinal cord patient is one of the most difficult tasks in trauma, especially considering rarity of these injuries.

Cervical spinal cord injuries are associated with multi-system dysfunction and physiological instability, consequently a higher rate of mortality and morbidity compared to lower thoracic and lumbar injuries.

At the same time the final outcome of a spinal cord injury depends largely on the adequacy, accuracy, speedy intervention or first aid as well as competency and experience of the multidisciplinary team involved in the diagnosis and treatment within the first few hours of injury.

In this presentation the author presents his personal experience in comprehensive care of spinal injuries in the UK, supported by available evidence from the literature.

## **Fundamentals Discussed**

In the acute stage of cervical cord injury, common causes of mortality directly related to SCI are respiratory failure, pneumonia, sepsis or pulmonary embolism; indirect causes are associated injuries which may be present in up to 60% of trauma cases.

Morbidities include respiratory insufficiency, bradycardia and hypotension, thromboembolism, peptic ulceration and bleeding, pressure ulcers, atelectasis, pneumonia and sepsis.

Neurological recovery and safe passage to rehabilitation are promoted by providing necessary support and adequate preventative measures within minutes of injury.

This study aims at showing some results of adopting a system of SCI service based at integration rather than coordination of acute trauma and rehabilitation services, providing comprehensive multidisciplinary care of the individual with acute SCI.

The results of adopting this system will be a significant reduction in mortality and morbidity and consequently better outcome, also allows building up of a specialist team experienced in the acute as well as rehabilitation management of potential and established high spinal cord injury.

## **Conclusion**

This paper is a call for the creation of comprehensive care regional spinal injuries centres with a multidisciplinary teams including surgeons, rehabilitation physicians, specialist nurses, physical and occupational therapists, psychologists and community coordinators; this will ensure elimination of the current fragmentation of service leading to provision of optimum care and reduction of complications, length of stay in hospitals, and generally better outcome of SCI.

Guidelines on optimum pre-hospital and initial management should be available to all healthcare professionals involved, prior to specialist care referral