

Introduction

Approximately 60% of spinal injuries involve the cervical region, with highest incidence of cervical spine injury occurring at the C₅ and C₆ levels, injuries to C₃ – T₁ gradually decrease with age. Where as the incidence of fracture to C1 and C₂ gradually rise because of odontoid fracture in the elderly ¹.

Traumatic cervical spine cord injury is a serious problem. Both respiratory and cardiovascular function are compromised as a result of the neurological deficit ².

Cervical spine injuries are best classified according to several mechanisms of injury. This include flexion, flexion rotation, extension, extension rotation, vertical compression, lateral flexion and others mechanisms that may result in odontoid fractures and atlanto-occipital dislocation ³.

Symptoms of cervical spine injury include pain in the neck, numbness or parasthesia in the upper extremities, sensory change, motor weakness, mylopathy or UMN (spasticity, hyperreflexia, clonus) and L.M.N.L (upper extremity hyporeflexia and atrophy) ⁴.

Tetraplegia (quadriplegia) is the term used to refer to loss of motor and / or sensory function due to damage to the spinal cord ⁵.

Imaging of the injured cervical spine has significantly evolved as a result of advances in neuroradiology as plain radiographs, computed tomography (C.T), magnetic resonance imaging and electromyography (EMG) ⁶.

Immobilization of the injured cervical spine is of vital importance⁷.

Reduction or realignment of the cervical spine within the first few hours of injury may lead to dramatic improvement in the neurologic status. Reduction within the two hours of injury may reverse tetraplegia. surgical interference may be necessary in some cases to decompress and fixation of fracture spine⁸.