Introduction

Symptomatic fractures spine are associated with significant morbidity, excess mortality, and social and health expenditure ***(Francis and Baillie, 2004)***.

Approximately 11.000 new spinal cord injuries occur each year, and about 250.000 peoples in the united state have spinal cord injury, half the injures occur in the cervical region and the other half occur in the thoracic, lumbar and sacral regions ***(Schneider man and Alexander, 2004)***.

The causes of fractures spine includes motor vehicles, accidents, and fall from height, sports, violence, osteoporosis and metastasis ***(Tator et al., 1999)***.

Cervical spine is the most injured site because it is the most mobile and dynamic portion (***Tator et al., 1999)***.

Thoraco-lumbar spine is the second injured site, 35% of the injured patients suffer complete neurological deficit, 40% suffer partial injury and 25% are neurologically intact ***(Wilkings and Rengachary, 1994)***.

Low lumbar fractures are relatively infrequent as compared with thoraco-lumbar fractures, as they have unique characteristic of injury due to the special features of anatomy and biomechanic of this region of the spine ***(Dai, 2001).***

Sacral fractures account 1% incidence in pediatric and about 2% in adult fractures ***(Dai, 2001).***

Fractures spine due to osteoporosis become a major health issue, they are relatively common and treatment has become increasingly expensive and complicated ***(Court Brown and Caesar, 2006)***.

Pathological fractures of the spine due to osteoporosis and mechanical instability with or without neurological compression due to malignancy can dramatically reduce a person's quality of life ***(Finkelstein and Ford, 2004)***.