



Role of Surgery in Traumatic Quadriplegia: Experience at a Level-I Trauma Center in a Developing Country

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Introduction

Background: Epidemiological data on the incidence of traumatic-quadriplegia in India is lacking.

Aims &Objectives: To assess the incidence, acute management and outcome of patients with traumatic-quadriplegia at a level-1 trauma centre in India

Methods

This prospective study was carried out over a one-year-period at JPNATC, AIIMS. Consecutive patients with traumatic-quadriplegia were followed up from admission to discharge. A telephonic questionnaire was administered to surviving patients at 6 months follow up.

Results

Of the 164 quadriplegic patients admitted, 33 had complete and 131 had incomplete quadriplegia. The age ranged from 11-70 years (mean 28 years) with a male: female ratio of 18:1. Follow up ranged from 1.2 months to 18 months (mean 7.4months). 60.6% (n=19) in the complete quadriplegia group underwent surgical management compared to 75.6%(n=99) in the incomplete quadriplegia group. In those operated, 42% (n=8) with complete and 32.3% (n= 32) with incomplete quadriplegia improved in postoperative period with 8% becoming ambulatory. No patient had deterioration in power in the postoperative period. The mortality was 47% and 23% in the complete and incomplete quadriplegic patients.

In the conservatively group, only one (7%) with complete and 8(25%) with incomplete quadriplegia improved in the follow-up period. The mortality was 64.2% and 22% in the complete and incomplete quadriplegic patients.

Conclusions

This is the largest study of its kind in the world literature and only of its kind from India. Ours study shows that significant number of patients with complete and incomplete injury improve following aggressive surgical management and can be discharged to home-based care.

Learning Objectives

1.Prognosis for traumatic quadriplegia.

Role of surgery in improving outcomes in Quadriplegia

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