

Introduction

Injection related iatrogenic peripheral nerves injury is potentially a serious problem in developing countries where besides qualified trained doctors, unqualified -untrained personals are also actively involved in the treatment of the patients. The occurrence is common following intramuscular injections of medicines. In the last decade, use of procedures like nerve blocks & central line placement has increased many fold along with increase incidence of injections related peripheral nerves injuries. In the present study we have analyzed our experience with respect to the clinical presentation, treatment options and outcome with respect to functional recovery after surgical treatment of various nerves injuries. The other features like mechanism of injection related nerves injury, timing of surgical intervention and potential medicolegal problem associated with this problem are also discussed.

Methods

Over 15-years, 251 cases of injection related iatrogenic peripheral nerves injuries surgically managed were following intramuscular injections, nerves block procedures, central line placements and routine intravenous injections. The age ranged from 5-years to 65 years. Sudden onset sensory-motor deficits were the common presenting findings following injections. The operative procedures performed were external neurolysis and nerve grafting. All surgical procedures were performed after minimum of 8-10 weeks of observation. The follow-up ranged from 6-months to 84-months with a mean follow-up of 11.8 months.

Learning Objectives

1. Timely and aggressive treatment has overall good functional recovery of the affected nerve.
2. The incidence of injection related peripheral nerves palsy can be prevented by employing anatomical principles and techniques.
3. Once the complication is known it is imperative for the treating doctor to refer the patient to a specialized center for management of injured nerve problem.
4. Physiotherapy has no role in the recovery of the nerve function.

Results

In the intramuscular injection group, functional recovery was noted in patients with radial nerve and tibial portion of sciatic nerve and in those where the surgery was performed within 4-6 months of injury. In the nerve block and central line placement group the functional outcome was worse even following external neurolysis and early surgery within 6-months. In this group C8-T1 roots- lower trunk was the common presenting findings.

Conclusions

It is of paramount importance that it should be timely and aggressively treated to achieve good functional recovery and reduce the incidence of medicolegal litigation.

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