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## Investigating Factors Affecting Length of Hospital Stay in Children with Guillain-Barre Syndrome

### Abstract

**Background:** Guillain Barre Syndrome (GBS) is an immune mediated neuropathy following infection with a highly variable course and outcome. The aim of this study was to investigate the factors affecting the length of hospital stay of children with GBS.

**Methods:** In this retrospective descriptive-analytical study, the records of 324 children with GBS admitted in Tabriz Pediatric Hospital from June 2003 to December 2013 were studied. By carefully reviewing the existing information, the missing cases were carefully examined and any possible errors in record-keeping were eliminated as far as possible

**Results:** 175 patients (54%) were female and 149 patients (46%) were male. The age range was at least 6 months and maximum 16 years old and the mean was  $5.13 \pm 3.66$  years. In this study, cases referring in summer were reported more (104 cases, 32.1%) than other seasons. In the treatment of patients with Guillain Barre, 272 (86.4%) patients were treated with IVIG, of which 206 (65.4%) received IVIG alone and 66 (21%) with IVIG also received methylprednisolone. 17 cases (5.4%) were treated with plasmapheresis and 26 cases (8.3%) received no treatment. Sensory and autonomic nerve involvements were observed in 46.6% and 16.4% of children, respectively. Cranial nerve involvement was reported in 127 children (39.4%) of which most of patients had involvement of 9th cranial nerve (89 patients, 34.4%). Of the children under study, only 31 (9.6%) needed mechanical ventilation, with a mean of  $20.75 \pm 21.25$  days for these children. The mean duration of hospital stay was  $10.07 \pm 12.24$  days, with more than half of the children (181 patients, 59.9%) being discharged from hospital within one week. 107 (35.4%) children were hospitalized for one to four weeks and 14 (4.7%) were hospitalized for more than four weeks.

**Conclusion:** The duration of hospitalization in children with GBS has a direct relationship with the type of treatment, autonomic and cranial nerve involvement, severity of illness and mechanical ventilation.

**Keywords:** Guillain-Barre Syndrome, Children, Duration of Hospitalization