Prolonged Ventilatory Support for Patients Recovering From Guillain-Barré Syndrome

**Background** Recovery from Guillain-Barré syndrome (GBS) may be protracted, and patients may need prolonged ventilatory support. We present clinical data from a tertiary referral weaning center managing patients with GBS requiring prolonged ventilatory support.

**Methods** A retrospective review of patients managed in a 34-bed specialist ventilator weaning facility in London, United Kingdom, between 2006 and 2017. Data including demographics, initial presentation, and ventilatory support were collected. Functional recovery and outcome data were collected between 12 months and 3 years following disease onset.

**Results** Twenty-nine patients with severe GBS requiring prolonged ventilation were included. In several patients, coexisting conditions or complications affected the course. Seventy-six percent ($n=22$) were successfully weaned from invasive ventilation with a median time to tracheostomy decannulation of 193 days (range: 49–527 days). Use of noninvasive ventilation (NIV), as part of the weaning program, was applied in 59% (13/22), with 14% (3/22) requiring long-term nocturnal NIV. Twenty-four percent (7/29) were not decannulated, with 14% (4/29) supported on long-term invasive ventilation. Forty-five percent (10/22) weaned from invasive ventilation were able to achieve short distance–assisted ambulation. Mortality at 36 months was 17% (5/29), with 3 of these deaths occurring in patients invasively ventilated during their acute admission.

**Conclusions** GBS with severe respiratory muscle weakness and bulbar dysfunction may require prolonged invasive ventilation. However, there is potential for complete weaning from invasive mechanical ventilatory support with associated function recovery. These data highlight the importance of maintaining ongoing support and rehabilitation for patients with GBS requiring prolonged ventilation.

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Systematic Review and Meta-analysis of Diagnostic Agreement in Suspected TIA

**Objective** To determine the interrater variability for TIA diagnostic agreement among expert clinicians (neurologists/stroke physicians), administrative data, and nonspecialists.

**Methods** We performed a meta-analysis of studies from January 1984 to January 2019 using MEDLINE, EMBASE, and PubMed. Two reviewers independently screened for eligible studies and extracted interrater variability measurements using Cohen’s kappa scores to assess diagnostic agreement.

**Results** Nineteen original studies consisting of 19,421 patients were included. Expert clinicians demonstrate good agreement for TIA diagnosis ($\kappa = 0.71, 95\%$ confidence interval [CI] = 0.62–0.81). Interrater variability between clinicians’ TIA diagnosis and administrative data also demonstrated good agreement ($\kappa = 0.68, 95\%$ CI = 0.62–0.74). There was moderate agreement ($\kappa = 0.41, 95\%$ CI = 0.22–0.61) between referring clinicians and clinicians at TIA clinics receiving the referrals. Sixty percent of 748 patient referrals to TIA clinics were TIA mimics.

**Conclusions** Overall agreement between expert clinicians was good for TIA diagnosis, although variation still existed for a sizeable proportion of cases. Diagnostic agreement for TIA decreased among nonspecialists. The substantial number of patients being referred to TIA clinics with other (often neurologic) diagnoses was large, suggesting that clinicians, who are proficient in managing TIs and their mimics, should run TIA clinics.

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