**Review: Plasma exchange or intravenous immunoglobulin reduces disability in the Guillain-Barré syndrome**


**Question**
In patients with the Guillain-Barré syndrome (GBS), is immunotherapy consisting of plasma exchange, intravenous immunoglobulin (IgIV), or steroids effective for reducing GBS-related disability?

**Data Sources**
Studies were identified by searching MEDLINE (1966 to March 2002), the Cochrane Library (March 2002), and reviewing bibliographies of relevant studies and personal reference lists of the members of the practice parameter group.

**Study Selection and Assessment**
Studies were selected if they were randomized controlled trials (RCTs) that evaluated immunotherapy including plasma exchange, immunoadsorption, IgIV, or steroids in patients with GBS.

**Outcomes**
The primary outcome measure used in most RCTs was a 0 to 6 disability scale (0 = normal, 1 = symptoms but able to run, 2 = unable to run, 3 = unable to walk unaided, 4 = bedbound, 5 = needing ventilation, and 6 = dead).

**Main Results**
Plasma exchange: At 4 weeks, more patients who received plasma exchange than supportive care improved by ≥ 1 disability grade (Table). Mean improvement in disability grade was greater in the plasma exchange group than in the supportive care group (4 RCTs, n = 585) (weighted mean difference [WMD] −0.89, 95% CI −1.14 to −0.63).

IgIV: Meta-analysis of 3 RCTs (n = 398) that compared IgIV with plasma exchange showed no difference between groups for improvement in GBS-related disability at 4 weeks (WMD 0.11, CI −0.14 to 0.37).

**Commentary**
The possibility of using corticosteroids in GBS refuses to die. A recent trial did not show any benefit from the combination of IgIV and methylprednisolone (2). No other treatments show clinical promise at this time. Addition of interferon β-1a to IgIV was not helpful (3).

Until new ideas to test are formulated, we must concentrate on early identification of GBS, rapid institution of plasma exchange or IgIV as appropriate for the patient, and prevention or management of complications while we hope that the patient responds to treatment.

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**References**