

IMMUNOTHERAPY FOR Guillain-Barré Syndrome

This is a summary of the American Academy of Neurology (AAN) guideline on Guillain-Barré Syndrome (GBS). GBS affects between 1 and 4 per 100,000 of the population annually throughout the world, causing respiratory failure requiring ventilation in about 25%, death in four to 15%, persistent disability in about 20%, and persistent fatigue in 67%. The objective of the GBS practice parameter is to provide an evidence-based statement to guide physicians in the management of GBS.

The guideline concludes that:

- 1. Treatment with plasma exchange (PE) or intravenous immunoglobulin (IVIg) hastens recovery from GBS.
- 2. PE and IVIg are equally effective in patients with advance GBS symptoms.
- 3. PE may carry a greater risk of side effects and is more difficult to administer.
- 4. Combining the two treatments is not recommended.
- 5. Steroid treatment is not beneficial.

Please refer to the full guidelines for more information at: www.aan.com/professionals/practice/index.cfm.

Evidence for Immunotherapy in GBS management

	Plasma Exchange (PE)	IV Immunoglobulin (IVIg)	Combined Treatments	Corticosteroids
Strong evidence supports	PE recommended in nonambulant patients within 4 weeks of onset of neuropathic symptoms. (Level A*, Class II**)	IVIg recommended in nonambulant patients within 2 weeks of onset of neuropathic symptoms. (Level A, Class II)	Sequential treatment with PE followed by IVIg does not have a greater effect than either treatment given alone. (Level A, Class I)	Steroids not recommended in the treatment of GBS. (Level A, Class I)

	Plasma Exchange (PE)	IV Immunoglobulin (IVIg)
Good evidence supports	PE recommended for ambulant patients within 2 weeks of onset of neuropathic symptoms. (Level B, limited Class II) If PE started within 2 weeks of onset, there are equivalent effects of PE and IVIg in patients requiring walking aids. (Level B, Class I) PE is a treatment option for children with severe GBS. (Level B, derived from Class II evidence in adults)	 IVIg recommended in nonambulant patients started within 4 weeks from the onset of neuropathic symptoms. (Level B, Class II) If started within 2 weeks of onset, IVIg has comparable efficacy to PE in patients requiring walking aids if started within 2 weeks of onset. (Level B, Class I) IVIg is a treatment option for children with severe GBS. (Level B, derived from Class II evidence in adults)



	Combined Treatments	CSF Filtration	Immunoabsorption
Evidence is insufficient to support or refute	There is insufficient evidence to support or refute immunoabsorption treatment followed by IVIg. (Level U, Class IV)	There is insufficient evidence to support or refute the use of CSF filtration. (Level U, limited Class II)	The evidence is insufficient to support or refute immunoabsorption as an alternative to PE. (Level U, Class IV)

*Recommendations "Level" refers to the strength of the practice recommendation based on the literature. Level A: Established as effective, ineffective or harmful or as useful/predictive or not useful/predictive; Level B: Probably effective, ineffective or harmful or as useful/predictive or not useful/predictive; Level C: Possibly effective, ineffective or harmful or as useful/predictive; Level U: Data inadequate or conflicting. Treatment, test, or predictor unproven.

Class of evidence for therapy "Class" refers to the quality of research methods employed in the reviewed literature. **Class I: High quality randomized controlled trials (RCTs); **Class II**: Prospective matched group cohort studies or RCTs lacking adequate randomization or blinding or potentially liable to attrition or outcome ascertainment bias; **Class III**: Other studies such as natural history studies; **Class IV**: Uncontrolled studies, case series or expert opinion.

This is an educational service of the American Academy of Neurology. It is designed to provide members with evidence-based guideline recommendations to assist with decision-making in patient care. It is based on an assessment of current scientific and clinical information, and is not intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on the circumstances involved. Physicians are encouraged to carefully review the full AAN guidelines so they understand all recommendations associated with care of these patients.

Copies of this summary and a companion patient version are available at *www.aan.com/professionals/practice/index.cfm* or through AAN Member Services at (800) 879-1960.





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