IgM paraproteinaemic demyelinating neuropathy

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Condition for which IVIg has an emerging therapeutic role.

Specific Conditions	• IgM para-proteinaemic neuropathy
Indication for IVIg Use	• Functional impairment where other therapies have failed or are contraindicated or undesirable.
Level of Evidence	Conflicting evidence of benefit (Category 2c)
Description and Diagnostic Criteria	Immunoglobulin M (IgM) paraproteinaemic demyelinating neuropathy is a slowly progressive, predominantly distal sensory neuropathy that may eventually produce disabling motor symptoms. The condition is associated with IgM paraprotein, which may demonstrate antibody reactivity to myelin-associated glycoprotein (MAG). IgM paraproteinaemic demyelinating neuropathy is the most common subgroup of the monoclonal gammopathy of undetermined significance (MGUS) group. It is distinguishable from chronic inflammatory demyelinating polyneuropathy (CIDP) by: • the presence of tremor • a greater severity of sensory loss, with ataxia and relatively mild or no weakness • damage that tends to be permanent and a degree of improvement that is much smaller than the improvement observed in CIDP patients. Nerve conduction studies usually show symmetrical conduction slowing with markedly prolonged distal motor latencies and reduced or absent sensory responses. Testing for antibodies to neural antigens (MAG or other neural antigens) may be helpful.
Justification for Evidence Category	The Biotext (2004) review included three low quality studies (one randomised controlled trial (RCT), one case-control and one case-series) with 20 patients. No benefit from treatment with intravenous immunoglobulin (IVIg) was demonstrated in the case-control study (Biotext 2004). The Frommer and Madronio (2006) found a Cochrane systematic review of five medium-quality RCTs with 97 patients of any age with a diagnosis of MGUS. Ther was inadequate evidence of efficacy of IVIg in anti-myelin-associated glycoprotein paraprotein peripheral neuropathies.
Diagnosis Requirements	A diagnosis must be made by a Neurologist.

Qualifying Criteria for IVIg Therapy	• Significant functional impairment of activities of daily living, as measured by activities of daily living (ADL) or other functional/disability scale. AND • Other therapies have failed. OR • Other therapies are contraindicated or undesirable.
Review Criteria for Assessing the Effectiveness of IVIg Use	IVIg should be used for three to six months (three to six courses) before determining whether the patient has responded. If there is no benefit after three to six courses, IVIg therapy should be abandoned. Review by a Neurologist is required within six months and at least annually thereafter. Documentation of clinical effectiveness is necessary for continuation of IVIg therapy. **On review of the initial authorisation period** Clinical effectiveness of Ig therapy may be demonstrated by: • Improvement in disability compared to the qualifying assessment, as measured by activities of daily living (ADL) or other functional/disability scale. **On review of a continuing authorisation period** Clinical effectiveness of Ig therapy may be demonstrated by: • Improvement in, or stabilisation of, disability compared to the previous review assessment as measured by ADL or other functional/disability scale.
Dose	• **Induction Dose** - 2 g/kg in 2 to 5 divided doses. • **Maintenance Dose** - 0.4–1 g/kg, 2 to 6 weekly. Maintenance treatment only with clear, objective improvement. **Aim for minimum dose to maintain optimal functional status.** **The aim should be to use the lowest dose possible that achieves the appropriate clinical outcome for each patient.** **Refer to the current product information sheet for further information.**

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