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THERAPEUTIC PLASMAPHERESIS: THE SHEFFIELD EXPERIENCE

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Introduction Plasmapheresis has been shown in a randomised clinical trial (RCT) to be effective in treating corticosteroid-refractory central nervous system (CNS) inflammatory diseases. Data from our centre was compared with the published trial.

Methods A retrospective case note review of patients with CNS inflammatory diseases receiving plasmapheresis was performed. Power and gait scores from Weinshenker *et al.* (1999) and decimal visual acuity were recorded.

Results Data from 25 patients (optic neuritis=7, multiple sclerosis=12, neuromyelitis optica=4, acute disseminated encephalomyelitis=1, transverse myelitis=1) was reviewed. For the optic neuritis patients the mean visual acuity of the worse affected eye improved from 0.061 to 0.264 ($p=0.157$), equivalent to a change from approximately 6/100 to 6/24. For patients with a motor deficit, the mean power score improved from 5.78 to 4.78 ($p=0.0218$) and the mean gait score improved from 7.78 to 6.78 ($p=0.0218$). The mean motor improvement was from being wheelchair dependent to being able to walk a few steps with bilateral assistance. No benefit was observed if plasmapheresis commenced more than 82.7 days after onset of symptoms. No serious adverse events occurred.

Conclusions Benefits in line with the results of the RCT have been detected supporting the use of plasmapheresis in these diseases.