Objective: To describe three new cases of opsoclonus or ocular flutter in patients with multiple sclerosis.

Background: Opsoclonus and ocular flutter almost always occur as part of either a parainfectious or paraneoplastic syndrome. Toxic causes are also described. Most other etiologies are exemplified by single or only a few cases. The visible pathology in autopsied cases is very variable, and different pathophysiologic mechanisms have been proposed. The literature contains only one reasonably convincing case of opsoclonus, two of flutter, and one of both phenomena in the same patient, in patients with multiple sclerosis.

Design/Methods: Clinical description, videotape of eye movements, laboratory results, MRI scans.

Results: We present two cases of ocular flutter and one of opsoclonus in patients with definite multiple sclerosis. The opsoclonus case is documented on videotape, demonstrating the eye movements and the lack of an intersaccadic interval, as shown by saccades in different directions from one frame to the next (30 frames/second). This patient’s opsoclonus diminished markedly after IV methylprednisolone followed by oral prednisone. The two patients with ocular flutter were observed by a neuro-ophthalmologist familiar with this phenomenon. Both patients were also on lithium, which has been reported to be associated with opsoclonus, but only in patients with a toxic encephalopathy secondary to both lithium and haloperidol. One of our patients with flutter responded to Depakote, after being intolerant of both clonazepam and baclofen.

Conclusions: Opsoclonus and ocular flutter occur rarely in multiple sclerosis. We add three new cases to the four in the literature. Other factors may be contributory. A variety of treatments are possible. The implications in light of the possible pathophysiology of these disorders will be discussed.

Key Words: opsoclonus, ocular flutter, multiple sclerosis