

## [Abstract 24]

### IGM NEUROPATHIES IN WALDENSTRÖM'S MACROGLOBULINEMIA

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**Background:** Waldenström's macroglobulinemia (WM) is a malignant disorder characterized by bone marrow cells that produce a monoclonal IgM. Polyneuropathies are common, and often symptomatic, in WM. We studied the frequency and clinical and laboratory features of polyneuropathies in WM patients.

**Methods:** We studied 119 WM patients and 58 controls prospectively over the course of a weekend. Histories, neurologic physical examinations, electrodiagnostic evaluations and serum studies were performed. Tests were carried out by different examiners who were blinded to the results of other testing and to clinical information other than the diagnosis of WM.

**Results:** Electrodiagnostic evidence of polyneuropathies was more common in WM patients (46%) than in controls (19%). Absent sensory nerve action potentials were more common ( $p \leq 0.01$ ) in WM patients with IgM vs sulfatide (67%) or MAG (80%) than in WM patients with no binding (19%). Neuropathies in WM patients with IgM vs sulfatide had mainly sensory axon loss; those with IgM vs MAG had sensory-motor axon loss and demyelination with prolonged distal latencies. Neuropathies in patients with no binding to MAG or sulfatide were predominantly sensory and associated with gait disorders. Neuropathies were more common in older WM patients but this was probably due to a superimposed effect of age.

**Conclusions:** Polyneuropathies in patients with WM occur more frequently than in controls, are predominantly sensory and often involve gait disorders. IgM binding to MAG or sulfatide is associated with increased frequencies of polyneuropathy. Age-related changes may add to the frequency of neuropathies in WM patients.