

**Patterns of clinical presentation, treatment and outcome in patients with Waldenström's macroglobulinaemia. A two-institutional study**

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**Background**

Waldenström macroglobulinemia (WM) is in the WHO classification considered to be a clinical syndrome rather than a specific pathologic diagnosis. The clinical manifestations associated with WM relate to direct tumour infiltration, hyperviscosity and deposition of IgM in various tissues. The indications for and choice of treatment to vary considerably and no generally accepted prognostic models exist. The clinical features, treatment and prognosis of 72 patients with WM seen at one British (n=36) and one Swedish (n=36) academic centre were therefore compared.

Significantly more patients presented with a low albumin concentration (<vs>40 g/l, p<0.001), anaemia (haemoglobin <vs>120 g/l; p<0.001), thrombocytopenia (<vs>150x10<sup>9</sup>/l; p<0.05), hepatomegaly (p<0.001), splenomegaly (p<0.01) and lymphadenopathy (p<0.01), at St. Bartholomew's Hospital (SBH) in comparison to the Karolinska Hospital (KH). Fifty-six percent of SBH patients received chemotherapy immediately following diagnosis as compared to 14% at KH. The median overall survival of all patients was 6.3 years; 4.2 years and 11.0 years at SBH and KH, respectively (p<0.001). In univariate analysis, anaemia (haemoglobin<120 g/l) and albumin <35 g/l (but not <40 g/l) at diagnosis predicted a worse overall survival. The presence of hepato- and/or splenomegaly and/or lymphadenopathy was significantly associated with anaemia (p<0.001) and hypoalbuminaemia (p<0.001).

The mean Morel score (including age, albumin and cytopenias) of patients treated at SBH (2.6) was significantly higher than that of KH patients (1.6; p<0.001).

These findings illustrate the clinical heterogeneity of WM, most probably explained by differences in referral patterns and in addition, a need for establishing standard criteria for diagnosis, response to treatment and prognostic features.