

## [ABSTRACT WM3.11]

### **Clinical Profile And Treatment Outcome In 103 Patients With AL Amyloidosis Associated With IgM Paraproteinaemia**

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**Introduction** Most patients with AL amyloidosis (AL) have a subtle underlying plasma cell dyscrasia and underlying IgM paraproteinaemia is rare. The profile of AL amyloidosis associated with IgM paraproteinaemia remains poorly studied. Majority of the IgM paraproteinaemia patients have an underlying lymphoproliferative disorder and the treatment outcome is not well known. **Materials and Methods** We report the clinical profile and outcome of 103 patients with IgM associated AL amyloidosis seen at the National Amyloidosis Centre, UK. Patients were selected if they had a confirmed diagnosis of AL amyloidosis, presence of an IgM paraprotein and absence of any other monoclonal protein in the serum or urine by electrophoresis or immunofixation. Response was assessed using the worse of either conventional paraprotein response as per with Waldenstrom's (WM) criteria or free light response (FLC) by amyloidosis consensus criteria. **Results** The M:F ratio was 1.7:1, median age 65 yrs. The bone marrow showed lymphoplasmacytoid infiltration 42 (41%), lymphoid infiltration in 24 (23%), plasma cell infiltrate in 10 (9%) and was normal or non-diagnostic for a clonal population in 27 (26%). The median number of organs involved was 2, including renal 56%, heart 32%, liver 41%, lymph nodes 22%. The median IgM level was 9g/l (range immunofixation positive to 60g/l). A total of 75 patients were assessable for response to initial treatment. Twenty five (32%) of the 77 evaluable patients responded with no conventional complete responses (CR). An FLC response was seen in 12/22 (55%) patients evaluable for a FLC response, with a CR by FLC criteria in 3/22 (14%) and partial response in 9/22 (41%). Combination chemotherapy (VAD, CHOP, CVP, R-CVP) or purine analogues (fludarabine, cladribine, FCR, cladribine rutiximab) appeared to be more effective with 13/22 (59%) responding when compared as a group to the conventional oral agents (chlorambucil, oral melphalan and oral cyclophosphamide) with 7/34 (20%) responders but the numbers are too small for meaningful statistical comparison. Organ responses occurred in only 2 of 25 (12%) hematological responders. On multivariate analysis, the factors independently affecting survival were performance status and liver involvement by consensus criteria. **Discussion:** In summary, the presenting features of IgM associated AL are similar to AL with non-IgM paraproteins, though lymph node involvement was more common. The response to treatment was poor with no complete responses though patients given intermediate dose chemotherapy appeared to have higher responses. Similarly, the improvement in organ function was small. This study highlights the continuing difficulty in effectively treating patients with IgM paraproteinaemia associated AL amyloidosis and studies using the more effective regimes are needed.