

[Abstract 15]

CORRELATION BETWEEN SIZE OF IGM M-SPIKE AND DIAGNOSIS IN CHRONIC LYMPHOPROLIFERATIVE DISORDERS

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Background: Waldenstrom macroglobulinemia (WM) has been defined by the presence of a clonal lymphoid population in the bone marrow (BM) and a serum IgM spike, but IgM spikes may also be seen in other chronic lymphoproliferative disorders (CLPD). The association between the size of the IgM M-spike and the frequency of different CLPD's has not been examined.

Design: We examined the morphologic (+/- flow cytometric (FC) and/or paraffin immunophenotypic) features of peripheral blood and BM specimens and extramedullary tumors from 419 patients with an IgM M-spike, subsequently reviewed the clinical history, and correlated the findings with the size of the M-spike. Diagnoses were categorized as follows: 1. Lymphoplasmacytic lymphoma[LPL], (consistent with WM) 2. CLPD-not otherwise specified [CLPD-NOS], (BM too minimally involved to distinguish WM from another CLPD) 3. Other CLPD (definitely diagnosed as a CLPD other than WM), 4. Monoclonal gammopathy of undetermined significance [MGUS], 5. Primary amyloidosis [1^o amyloid], 6. Other hematolymphoid malignancy [other], and 7. No clinical history available [no history].

Results:

Diagnosis versus Size of IgM M-Spike

IgM (g/dL)	0-<1	1-<2	2-<3	>=3	TOTAL
# of cases	141	124	71	83	419
LPL	25%	42%	79%	92%	52%
CLPD-NOS	17%	15%	10%	1%	12%
OTHER CLPD	18%	6%	1%	4%	9%
MGUS	17%	9%	1%	0%	9%
1 ^o AMYLOID	3%	6%	3%	1%	4%
OTHER	4%	2%	1%	1%	2%
NO HISTORY	15%	19%	3%	1%	12%

The most common "other CLPD" diagnoses were: chronic lymphocytic leukemia (n=14), MALT lymphoma (n=7), large B-cell lymphoma (n=6), and splenic marginal zone lymphoma (n=5).

Conclusions: As the size of the IgM M-spike increases, the likelihood of WM increases and the likelihood of another CLPD decreases. However, WM should be diagnosed with caution in patients with a small IgM M-spike, as only a fourth of patients with an M-spike <1.0 g/dL have a BM that is diagnostic of WM. Conversely, even in patients with an M-spike >= 3.0 g/dL, diagnoses other than WM may occasionally be encountered.