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IgD- λ Multiple Myeloma: A Case Report and Literature Review

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INTRODUCTION

To investigate the clinical and laboratory characteristics of IgD- λ multiple myeloma (MM), a rare subtype, and improve its clinical recognition and accurate diagnostic capacity.

RESULTS

The patient presented with moderate anemia. Bone marrow showed marked hypercellularity, with plasma cells accounting for 85.5% (69% immature), and 11% plasma cells were detected in peripheral blood. Flow cytometry identified 89% abnormal plasma cells highly expressing CD38, CD138 and cLambda; conventional karyotype was 46,XY[3]. FISH revealed 1q21 locus amplification (39% positive) and FGFR3 copy number loss (74% positive). Serum and urine free λ light chains were drastically elevated, and serum immunofixation electrophoresis confirmed IgD- λ monoclonal gammopathy.

CONCLUSION

IgD- λ MM is clinically rare and easily misdiagnosed. Comprehensive detection integrating bone marrow morphology, immunophenotyping, immunofixation electrophoresis and molecular genetics is essential for definite diagnosis, and early precise diagnosis is critical to guide individualized clinical treatment

REFERENCES

1. Kumar SK, Rajkumar SV, Dispenzieri A, et al. Improved survival in multiple myeloma and the impact of novel therapies. *Blood*. 2008 Mar 1;111(5):2516-20.
2. Rajkumar SV, Dimopoulos MA, Palumbo A, et al. International Myeloma Working Group updated criteria for the diagnosis of multiple myeloma. *Lancet Oncol*. 2014 Nov;15(12):e538-48.
3. [1] Zhang Q Y, Zhao S J, Wei F X, et al. [Clinical Characteristics and Prognosis of Patients with IgD Multiple Myeloma]. [J]. *Zhongguo shi yan xue ye xue za zhi*, 2025, 33(2):437-441.
4. [1] 杨雪, 杨扬, 王文静, 等. IgD型多发性骨髓瘤临床特征、新药治疗效果及预后分析[J]. *中国临床医学*, 2022, 29(03):415-420.

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