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A Rare Case of Plasmacytoma Presenting as a Pulmonary Mass

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CASE DIAGNOSIS

In this report, we describe a rare clinical presentation of a 56-year-old asymptomatic female patient who was diagnosed with a right upper lobe pulmonary mass during a routine chest CT scan. Further examination was conducted using a CT-guided biopsy, which revealed the mass to be a plasmacytoma. Serological and electrophoretic analyses indicated elevated levels of gamma-globulin and M-protein, with IgG λ M-protein positivity. A bone scan and subsequent CT-guided bone biopsy confirmed the presence of plasmacytoma, and genetic analysis revealed 17p deletion and 1q21 amplification.

TREATMENT & OUTCOME

The patient was treated with a combination chemotherapy regimen consisting of bortezomib, dexamethasone, and thalidomide. Following four cycles of chemotherapy, the pulmonary mass was resolved completely, and the patient achieved stringent complete remission based on comprehensive blood and bone marrow analyses.

DISCUSSION

Extramedullary plasmacytomas (EMPs) are relatively uncommon, occurring in approximately 7%-18% of multiple myeloma patients. Pulmonary plasmacytoma, in particular, is a rare occurrence. While thalidomide has demonstrated limited efficacy in managing EMPs, our patient responded remarkably to the combined chemotherapy regimen.

CONCLUSION

This case highlights the importance of prompt diagnosis and effective treatment strategies for such rare presentations of plasmacytoma. Early detection and appropriate management can lead to favorable outcomes, as demonstrated in this case. Further research is needed to explore the efficacy of combined chemotherapy regimens in managing rare presentations of plasmacytoma and to identify optimal treatment strategies for these patients.

REFERENCES

[1] JOAN B, CARLOS F D L, LAURA R, et al. Soft-tissue plasmacytomas in multiple myeloma: incidence, mechanisms of extramedullary spread, and treatment approach[J]. J Clin Oncol, 2011, 29(28).

[2] ROSIñOL L, CIBEIRA M, BLADé J, et al. Extramedullary multiple myeloma escapes the effect of thalidomide[J]. Haematologica, 2004, 89(7): 832-836.

[3] RAQUEL J-S, LAURA R, MA TERESA C, et al. Paraskeletal and extramedullary plasmacytomas in multiple myeloma at diagnosis and at first relapse: 50-years of experience from an academic institution[J]. Blood Cancer J, 2022, 12(9).