PLEURAL PLASMABLASTIC PLASMACYTOMA: A CASE REPORT (6-YEAR FOLLOW UP)

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BACKGROUND: Plasmacytoma is an immunoproliferative, monoclonal disease of the B-cell line and is classified as non-Hodgkin lymphoma. It originates as a clone of malignant transformed plasma cells from pathologic plasmablasts that dedifferentiate during maturation process from primary and secondary B blasts to plasmablasts into malignatly transformed plasmablasts situated in the bone marrow. In rare cases malignant transformed plasma cells may also settle in soft tissue or in extracellular connective tissue area which is called extramedullar plasmacytoma (EMP). EMP can be differentiated into primary EMP and extramedullary manifestations of multiple myeloma. Dissemination of EMP in pleura found to be exceptionally rare.

CASE REPORT: We report a case of plasmablastic EMP of pleura as a manifestation of multiple myeloma. A 38-year old male presented to our clinic with pleural mass of right lung seen on chest x-ray. Past medical history was not significant. Patient did not give any history of fever, night sweats, chills or weight loss. Complete blood count and biochemical values were within normal limits. Serum and urine electrophoresis for gammaglobulins and Bence-Jones proteins were negative. Although bone marrow aspirate and biopsy are key component to the diagnosis and bone marrow of the vast majority of patients contains 10% or more clonal plasma cells in this case bone marrow examination was normocellular with 4% plasma cells.
Computed tomography showed a soft tissue mass of pleura measuring 4x2 cm in right thorax involving and destructing third rib. Magnetic resonance imaging of the spine revealed a compression fracture of Th 5 suggesting metastatic malignancy. Transthoracic aspiration punction suggested plasmacytoma but thoracotomy with pleural mass excision was performed. Immunohistochemical staining revealed tumor cells positive for kappa light chains, CD 138, CD 56 and negative for lambda light chains, LCA and PAX-5. Pathologic examination of the
specimen demonstrated connective tissue, skeletal muscle and rib infiltrated with atypical plasma cells. Based on histology and immunohistochemistry final diagnosis was plasmablastic plasmacytoma. Patient was transferred to Hematology Clinic. In last 6 years patient was treated with chemotherapy and radiation therapy and is still in active treatment.

CONCLUSION: Although extramedullary plasmacytoma of pleura is extremely rare tumor, it should be considered in the differential diagnosis of the pleural masses.