Editöre Mektup/Letter to the Editor

Pulmonary adenocarcinoma coexisting with multiple myeloma

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Dear Editor,

Multiple myeloma (MM) is the second most frequent haematologic malignancy, characterized by malignant proliferation of plasma cells in bone marrow, presence of monoclonal protein in serum or urine, anemia, hypercalcemia and lytic bone lesions (1). Development of secondary malignancy in MM is more common than general population (2,3). In literaure, coexistence of multiple myeloma with pulmonary adenocarcinoma is rarely reported. Here we present adenocarcinoma coexisting with MM in a case.

A fifty-five years old male was hospitalized in our unit for chest pain aggravating with motion and deep inspiration for one month. He had suffered from pulmonary tuberculosis 15 years ago but there was no particularity in his family history. His physical examination showed no pathologic findings except for pallor and generalized tenderness over the costae.

Laboratory analyses showed an erythrocyte sedimentation rate of 110 mm/hour and a CRP of 47 mg/L. Haematological values were hemoglobin 8 g/dL, hematocrit 23%, MCV 98 fl, leukocyte count 8000/µL, neutrophils 5500/µL, lymphocytes 1700/µL and platelets 260.000/µL. On peripheral smear, there were macrocytosis and anemia and rouleaux formation in erythrocytes. Bone marrow aspiration and biopsy demonstrated 40% plasma cell infiltration. Biochemical analysis were normal except of sodium 127 mmol/L, total protein 11.5 g/dL, albumin 2.1 g/dL, ferritin 134 ng/mL, α_1-globulin 0.5 g/dL, α_2-globulin 1 g/dL, β-globulin 0.8 g/dL, γ-globulin 5.5 g/dL, M-spike 5.77 g/dL, and β_2-mikroglobulin 3.16 mg/L. While his urine immunelectrophoresis was normal, IgG kappa type monoclonal gammopathy was found in his serum immunelectrophoresis.

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Multiple lytic lesions were detected only in the costae and a mass in the upper zone of the right lung on chest X-ray. Computed thorax tomography (CTT) showed presence of diffuse lytic lesions along with sequelae lesions in upper lobes of both lungs consistent with tuberculosis. A hypodense nodule (2 x 2.5 x 2 cm) with irregular contours was seen in the posterior segment of upper lobe of the right lung localized in subpleural zone (Figure 1). There was no pathologic finding in bronchoscopy. Bronchoscopic examination of the mass showed no atypical cells. Specific and nonspecific cultures obtained from lavage material were sterile. Technetium 99 m hexaxis 2-methoxyisobutyl isonitryle (Tc-99 m MIBI) cyntigraphy was performed by considering that the mass could be a plasmocytoma. No retention was observed in the mass. Then, positron emission tomography (PET) was performed and retention was detected. Computed tomography-guided transthoracic biopsy and pathologic examination of the material obtained from the mass was consistent with adenocarcinoma.

The patient was considered inoperable due to his deteriorated general condition and MM. He was given a chemotherapy protocol consisting of vincristine, adriablastina and dexamethasone in addition to isoniacide prophylaxis. After two courses of chemotherapy, his general condition ameliorated and his complaints regressed. The patient is still being followed in our outpatient clinic.

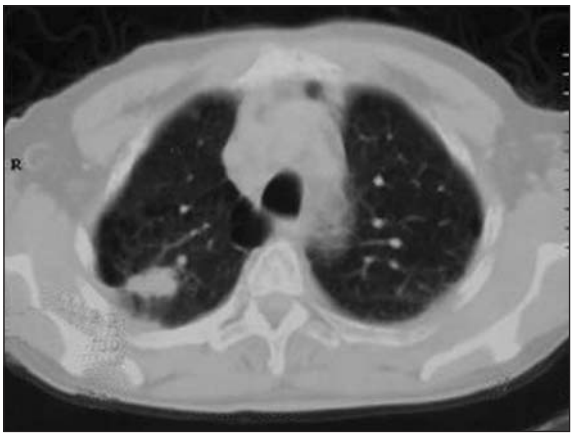

Figure 1. CT scan revealed a hypodense nodule (2 x 2.5 x 2 cm) with irregular contours in the posterior segment of upper lobe of the right lung localized in subpleural zone.

There are reports which demonstrate that MM, a clonal neoplasy of terminally differentiated B lymphocyte cells, coexists with hematologic and non-hematologic malignancies (2,3). In a study by Law et al. out of seven MM patients, four had acute leukemia and the other three had renal cell carcinoma, colonic and pulmonary adenocarcinoma (2). Also, in a study by Christou et al. pulmonary, bladder and colonic adenocarcinomas were detected in three patients during diagnosis of MM and secondary carcinoma incidence was reported to be high during the course of MM (3). In another study investigating solid cancers coexisting with MM, incidence of solid cancer development was found to be 6.2%. Distribution of cancers included hepatocarcinoma (two cases), cholangiocarcinoma (one case), breast adenocarcinoma (one case), endometrial adenocarcinoma (two cases), bladder adenocarcinoma (one case), pulmonary adenocarcinoma (one case), prostatic adenocarcinoma (two cases) and soft tissue sarcoma (two cases). Solid cancer was seen especially in IgG myelomas in the elderly (4).

In conclusion, secondary malignancies might be seen in the course of MM albeit rarely. Thus, a secondary malignancy -bladder, pulmonary or colonic adenocarcinoma in the first place- should be considered in a patient with findings that could not be associated with MM and investigations targeted to these sites should be intensified. The lung cancer should be considered in the differential diagnosis of solitary (extramedullary) plasmocytoma in the patients with multiple myeloma who had lung tumour.

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