Paravertebral Extramedullary Tumors with Chronic Myelogenous Leukemia

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To Editor,

An 87-year-old man presented with leukocytosis and thrombocytosis. Bone marrow analysis showed markedly myeloid hyperplasia with a slight proliferation of myeloblasts, basophils, and eosinophils. The cytogenetic examination showed Philadelphia chromosome without additional chromosome abnormalities. We diagnosed as chronic myelogenous leukemia (CML) in chronic phase .

Computed tomography (CT) scan of the thorax showed bilateral paravertebral tumors (image1). We performed needle biopsy of the right-sided tumor. The specimen revealed the same pattern as those of bone marrow in microscopic findings (image2 H&E x 400), flow cytometry analysis, and chromosome analysis. We thought the tumors as extramedullary hematopoiesis.

We started to administer nilotinib 600 mg, but we could not help reducing it to 300 mg because of grade 3 thrombocytopenia. He achieved a complete cytogenetic response (CCyR) three months later and paravertebral tumors reduced in CT scan (image 3).

The case of CML with extramedullary blastic infiltrates should be diagnosed and treated as CML in blast crisis. However, a few cases were reported that extramedullary tumors were the hematopoie-

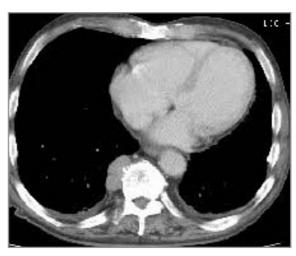


Figure 1. Computed tomography image showing bilateral paravertebral solid masses

sis.²⁻⁴ Such cases were treated by tyrosine kinase inhibitor and had better clinical courses than those of CML in blast crisis.²⁻⁴ In our case, low dose nilotinib was effective in treating both extramedullary hematopoiesis and bone marrow.

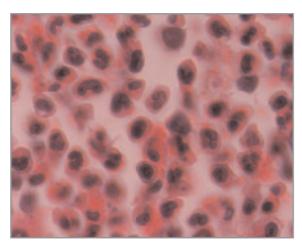


Figure 2. Histopathological examination of paravertebral mass showing marked myeloid hyperplasia with slight proliferation of myeloblasts, basophils and eosinophils (H&E x 400)



Figure 3. Computed tomography image showing reduced paravertebral masses

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