A case of metastatic malignant melanoma with bone marrow involvement

A 34-year old man was admitted to hospital because of persistent fever and massive hepatosplenomegaly. His past history included excision of a melanoma of the right ear at the age of 16. A blood cell count showed anemia, thrombocytopenia and normal white blood cell (WBC) count with normal differential count. Neutrophils and monocytes containing black pigment were detected in the peripheral blood buffy coat (Figure 1). Bone marrow was infiltrated by large, sometimes spindly, tumor cells with prominent nucleoli and the cytoplasm filled with numerous granules of melanin (Figure 2). The liver biopsy showed secondary localization of pigmented neoplasia. Thus, a diagnosis of relapsed metastatic malignant melanoma was made.

Malignant melanoma involves bone marrow in about 5% of patients with disseminated disease and is often amelanotic. If melanin is present, as in our case, the diagnosis is easy; the finding of black pigment in circulating neutrophils and monocytes may point in this direction.

Rosangela Invernizzi, Alessandro Pecci
Medicina Interna ed Oncologia Medica, Università di Pavia, IRCCS Policlinico S. Matteo, Pavia, Italy

Correspondence: Rosangela Invernizzi, M.D., Medicina Interna ed Oncologia Medica, Policlinico S. Matteo, P.le Golgi, 2, 27100 Pavia, Italy. Phone: international +39-0382-502160 - Fax: international +39-0382-526223 - E-mail: r.invernizzi@smatteo.pv.it

Figure 1. Peripheral blood buffy coat. A neutrophil (L) and a monocyte (R) containing granules of melanin. MGG x 1,250.

Figure 2. Bone marrow smear. Besides some normal hematopoietic cells, there are tumour cells, sometimes spindle-shaped, containing melanin. MGG x 500.