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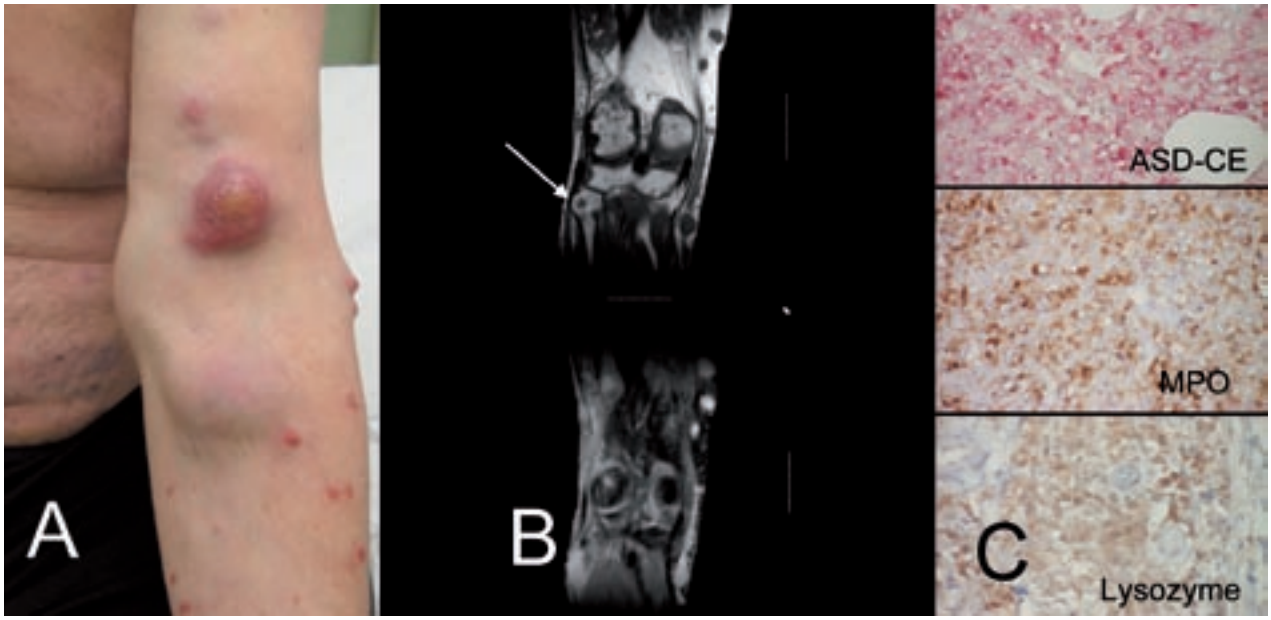
Chloromas



A 70-year-old man presented with multiple skin lesions that gradually increased in size and numbers (Fig. 1A). His medical history was significant for diabetes, bladder- and basal cell carcinoma. Magnetic resonance imaging (MRI) showed multiple disseminated tumor masses in the bones and subcutis (Fig. 1B). A bone marrow smear revealed pathological myeloproliferative cells. Histopathological evaluation of a subcutaneous tumor revealed a highly malignant blastic cell population with immunohistochemical positivity for myeloperoxidase (MPO), lysozyme, and CD68 as well as histochemical positivity for chloroacetate esterase (ASD-CE) (Fig. 1C), consistent with the diagnosis of granulocytic sarcoma on the basis of acute myeloblastic leukaemia (AML).

First described in 1811, granulocytic sarcomas (GS) present as a complication in hematologic neoplasias and were termed "chloroma" in 1853 due to their green colour, caused by enzymatic reaction of myeloperoxidase in the tumor cells [1]. Whereas cases of isolated GS have been described, most GS develop during the course of myeloproliferative disorders or leukemias, like in our patient [2]. The incidence of GS in AML is quoted 2–8% [3]. The best therapeutic results are obtained when anti-AML chemotherapy is initiated at the diagnosis of GS [3]. In our case the patient was treated with systemic chemotherapy and radiotherapy, but response was poor and the patient died 8 months after initial presentation due to tumor progression and infection.

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Key words: Acute myeloblastic leukaemia, disseminated tumor, hematologic neoplasias, granulocytic sarcoma.

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