

[ PICTURES IN CLINICAL MEDICINE ]

## Cutaneous Myeloid Sarcoma

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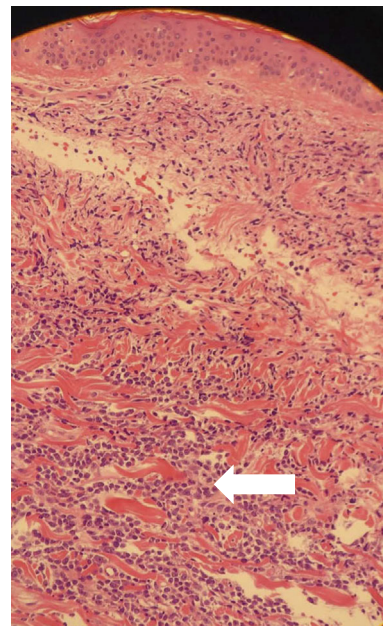
**Key words:** cutaneous myeloid sarcoma, chloroma

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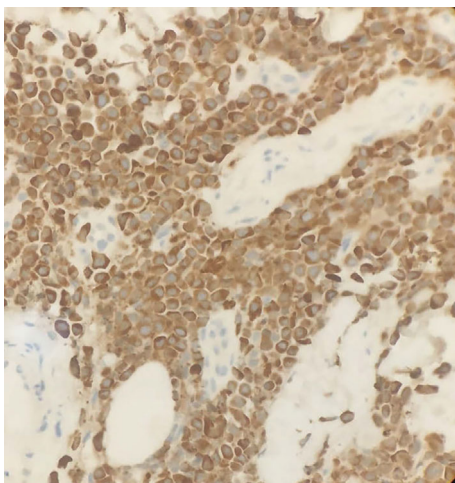
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**Picture 1.**



**Picture 2.**



**Picture 3.**

An 85-year-old man diagnosed with acute myeloid leukemia (FAB:M2) and treated with induction and consolidation chemotherapy achieved hematological complete remission. One month after the completion of consolidation therapy, he presented with multiple brown rashes on his abdomen and

back without pain or itching, which had not been seen at the diagnosis (Picture 1). The tumor involved the dermis and perivascular region and comprised myeloid blasts with multiple nucleoli, forming a cluster (Picture 2). It was positive for myeloperoxidase on immunohistochemistry (Picture 3). A blood analysis revealed that his complete blood count was normal, and the blast cells were not detected in his peripheral blood; however, a bone marrow examination indicated the recurrence of leukemia. Both at the diagnosis and recurrence, he tested positive for the cell surface markers CD13, CD34, and HLA-DR and negative for CD33 and CD56. The results of chimeric gene screening of acute myeloid leukemia (AML) were all negative, and a cytogenetic analysis showed a normal karyotype; the FLT3 mutation was not detected. His rash disappeared with intensive reinduction chemotherapy. Myeloid sarcoma (MS), also referred to as extramedullary acute myeloid leukemia or chloroma, is a rare

manifestation that is characterized by myeloid tumor masses occurring at an extramedullary site (1-3). MS can represent the initial manifestation of relapse in previously treated AML in remission (2). Aboutalebi et al. reported that 2 of 25 patients with cutaneous MS exhibited cutaneous MS without concurrent peripheral blood or bone marrow disease following chemotherapy-induced complete remission (4). Physicians should perform bone marrow aspiration and a skin biopsy if they encounter such a rash in leukemia patients, even if hematologic remission is achieved.

**The author states that she has no Conflict of Interest (COI).**

## References

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