meningeal involvement at diagnosis. The patient received standard 7+3 induction (cytarabine + idarubicin) achieving complete hematologic remission. Due to absence of suitable donor, autologous stem cell transplantation was performed. Despite achieving complete remission and remaining asymptomatic, prophylactic intrathecal methotrexate and cytarabine was initiated every 6 months for CNS protection. Serial CSF examinations from 2019-2024 showed no blast cells. Bone marrow biopsies consistently demonstrated hypocellular marrow without blasts, with negative CD34 and CD117. The patient has maintained complete remission for 7 years without neurological symptoms or complications. Case 2: A 46-year-old male (born 1973) presented in 2019 with anemia, thrombocytopenia, and fatigue. Bone marrow analysis confirmed AML with flow cytometry showing CD33 (99%), MPO (98%), high HLA-DR expression, but negative CD34 and CD117, consistent with aggressive AML phenotype. CSF examination at diagnosis confirmed CNS involvement. After achieving complete remission with standard 7+3 induction (cytarabine + daunorubicin), the patient underwent allogeneic stem cell transplantation. Similar to Case 1, prophylactic intrathecal methotrexate and cytarabine was administered every 6 months despite clinical remission. Follow-up from 2020-2023 showed consistently negative CSF examinations and stable bone marrow remission with <5% blasts. The patient has maintained complete remission for 6 years without transplant complications or neurological sequelae. Discussion: These cases demonstrate several important clinical principles in managing AML with CNS involvement. First, both patients achieved sustained remission despite CNS involvement at diagnosis, traditionally associated with poor prognosis. The combination of intensive systemic therapy, stem cell transplantation, and prolonged prophylactic intrathecal therapy appears crucial for success. The extended prophylactic intrathecal therapy regimen (6-7 years) far exceeds standard recommendations but proved remarkably safe and effective. The 6-monthly interval appears optimal, providing adequate CNS protection while minimizing procedure-related risks and patient burden compared to more frequent administration. The contrasting transplant approaches (autologous vs. allogeneic) achieved similar outcomes, suggesting that the prophylactic intrathecal strategy may be more important than transplant type for CNS disease control. Both patients demonstrated excellent tolerance to repeated lumbar punctures without cumulative neurotoxicity. The absence of CNS relapse in both cases over 6-7 years strongly supports the efficacy of this prophylactic approach. Traditional concerns about prolonged intrathecal therapy causing neurotoxicity were not observed, possibly due to the extended interval between treatments. Conclusion: Extended prophylactic intrathecal therapy administered every 6 months following stem cell transplantation represents a safe and highly effective strategy for preventing CNS relapse in AML patients with initial CNS involvement. These cases challenge conventional limitations on prophylactic therapy duration and support consideration of extended prophylaxis in high-risk patients. The excellent long-term outcomes without significant complications suggest this approach should be considered for similar cases, potentially improving survival in this traditionally poor-prognosis population.

https://doi.org/10.1016/j.htct.2025.106151

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MYELOID SARCOMA PRESENTING IN THE RETROMOLAR TRIGONE WITHOUT MARROW INVOLVEMENT

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Introduction: Myeloid sarcoma (MS), also known as granulocytic sarcoma or chloroma, is a rare extramedullary tumor composed of myeloblasts. It may occur de novo, concurrently with acute myeloid leukemia (AML), or as a relapse of previously treated AML. Oral cavity involvement is rare, and isolated presentations without bone marrow disease pose significant diagnostic challenges . MS is biologically considered equivalent to AML and should be treated accordingly, even in the absence of systemic disease . **Case Presentation:** A 51-year-old woman presented with left facial swelling and dysphagia. MRI revealed a large mass in the left retromolar trigone extending to the skull base and infratemporal region with associated mandibular bone destruction. Incisional biopsy showed sheets of immature myeloid cells. Immunohistochemistry was positive for CD117, CD34, myeloperoxidase (MPO), and CD99, with a Ki-67 proliferation index of ~40%, confirming myeloid sarcoma. PET-CT revealed a hypermetabolic mass (SUVmax 7.27) and ipsilateral cervical lymphadenopathy but no systemic FDG-avid disease. Bone marrow biopsy showed no leukemic infiltration The patient was treated for acute myeloid leukemia and was started on a 7+3 chemotherapy protocol. The patient is being monitored during the post-treatment cytopenic period. **Conclusion:** ConclusionThis case highlights the diagnostic complexity of isolated myeloid sarcoma in an unusual location. Comprehensive immunophenotypic analysis is essential for diagnosis. Although marrow was uninvolved, the patient was initiated on AML-type induction chemotherapy due to the high risk of progression . Early systemic treatment, rather than localized therapy alone, is critical to avoid transformation into overt leukemia . Systemic chemotherapy using AML-like regimens should be commenced early, even in nonleukemic disease. Surgery and/or radiotherapy may be indicated for symptomatic lesions or tumors causing local organ dysfunction or obstruction. Allogeneic hematopoietic stem cell transplantation has demonstrated promising results, particularly in patients who achieved complete remission with AML-induction protocols, and recent advances in genetic profiling may enable the development of novel targeted therapies . Clinicians should maintain a high index of suspicion for MS in atypical head and neck masses.

https://doi.org/10.1016/j.htct.2025.106152