SOHO ANNUAL MEETING 2024

Myeloid Sarcoma and Lymphoid Sarcoma of the Brain: A Case Series

Asad Haider, MD[1], Sara Taveras Alam, MD[1], Ledian Memushaj, NP[1], Joshua Esquanazi, MD[2], P. Roc Chen, MD[2], Adan Rios, MD[1]
1. Division of Hematology/Oncology, McGovern Medical School, The University of Texas Health Science Center at Houston
2. Division of Neurosurgery, McGovern Medical School, The University of Texas Health Science Center at Houston

UTHealth The University of Texas Health Science Center at Houston

INTRODUCTION

Central nervous system (CNS) myeloid and lymphoid sarcoma (MS, LS) are uncommon and pose diagnostic and management challenges. There are few large-scale studies on the management of CNS MS and LS.

OBJECTIVE

Describe the presentation, diagnosis, management, and outcomes of CNS MS in 4 patients and CNS LS in 1 patient.

CASE SERIES

Table 1: Demographics, Presentation, Treatment, and Outcomes for Myeloid Sarcoma and Lymphoid Sarcoma

Case	Age	Disease	Symptoms	Imaging	Treatment	Outcomes
1	44	MS in setting of CML	Altered mental status	Left lobe parietal mass	Fludarabine, idarubicin, cytarabine, ponatinib	Died 1 month later due to brain herniation
2	56	MS in setting of CBF-AML s/p SCT	Headache, dizziness, double vision	Widespread enhancing lesions in the brain	FLAG-GO → second SCT	Alive and in remission +100 days after second SCT
3	67	MS in setting of AML	Headaches, confusion	Intracranial mass	Fludarabine, cytarabine, venetoclax	Alive and planned for radiation
4	55	MS in setting of APML	Headaches, extremity weakness	Dural-based enhancing mass	ATRA + ATO → relapse → ATRA + ATO → intratecal chemotherapy	Alive and in complete remission
5	59	LS in setting of B-ALL	Dizziness	Dural-based enhancing mass	HyperCVAD → SCT → relapse → miniCVD + inotuzumab + blinatumomab	Alive and in complete remission

DISCUSSION

CNS MS & LS have unfavorable outcomes. Treatment depends on the localization, mass size, and patient's condition. Surgery, high-dose chemotherapy, and radiotherapy are used alone or in combination. CNS MS & LS are challenging, and treatment must be individualized.

ACKNOWLEDGEMENTS

Special thanks to Ms. Virginia Mohlere for her editorial assistance.