SOHO ANNUAL MEETING 2024

Hematological Malignancies and Pregnancy: A Single-Institution Experience

Sara Soliman[1], Ningjing Li[1], Sara Taveras Alam[1], Rachel Newman[2], Sean Blackwell[2], Adan Rios[1]

1. Division of Hematology/Oncology, McGovern Medical School, The University of Texas Health Science Center at Houston.
2. Division of Maternal-Fetal Medicine, McGovern Medical School, The University of Texas Health Science Center at Houston.

UTHealth The University of Texas Health Science Center at Houston

INTRODUCTION

Hematologic malignancy management in pregnancy is challenging, requiring careful multidisciplinary coordination.

OBJECTIVE

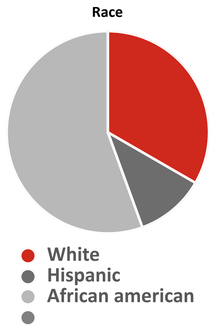
Analyze maternal and fetal outcomes of pregnant patients with hematological malignancies.

DESIGN

Retrospective study of pregnant patients with hematological malignancies at Memorial Hermann Hospital, between January 1, 2015, and May 31st, 2024.

PATIENT CHARACTERISTICS

Type of Malignancy	Number of Patients	Age at Diagnosis (Dx)
APML	2	22 & 32
AML	2	21 & 23
ATL	1	27
CML	2	32 & 36
PMBCL	1	27



RESULTS

Dx	Gestational age	Treatment	Maternal Outcome	Fetal Outcome
APL	25 weeks	ATRA	Massive ICH. Deceased within 48 hrs.	Deceased
APL	18 weeks	ATRA	Complete response (CR), had C-section at 39 weeks	Alive and healthy
ATL	12 weeks	Hyper-CVAD part A Modified part B (MTX omitted)	Initial CR and had elective induction of delivery at 32 weeks. She later relapsed and died.	Viable and healthy
AML	32 weeks	Fludarabine, cytarabine, and idarubicin.	Deceased 8 months post diagnosis from septic shock	Viable and healthy
AML	17 weeks	Fludarabine, cytarabine, and gemtuzumab ozogamicin.	CR and successful delivery at 34 weeks	Alive and healthy
CML	5 weeks	Hydroxyurea pulses during the second trimester.	Emergent C-section at 36 weeks due to preeclampsia	Alive and healthy
CML	6 weeks	Leukapheresis for hyperleukocytosis and pegylated interferon.	C-section at 37 weeks	Alive and healthy
PMBCL	First trimester	DA-EPOCH-R	Elective C-section at 33 weeks.	Alive and healthy

CONCLUSION

Hematologic malignancy during pregnancy is challenging, with a significant risk of maternal mortality. Standard treatment induction regimens can be safely administered during the second or third trimester of pregnancy. Multispecialty management including Maternal Fetal Medicine specialists are of paramount importance.