

Acute Myeloid Leukemia with Monosomy 7 in Sickle Cell Disease Post T Cell Replete Haploidentical Hematopoietic Stem Cell Transplant: Brief Report

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Abstract

Hematopoietic Stem Cell Transplant (HSCT) is increasingly being used as a curative treatment for various malignant and non-malignant conditions. Second malignancies are known long term complication post HSCT. Myeloid malignancies rarely occur post allogeneic HSCT. To the best of our knowledge there are no reported case of myeloid malignancy occurring in sickle cell disease (SCD) patient post haploidentical HSCT. We report 2 patients with SCD, who developed Acute Myeloid Leukemia (AML) with monosomy 7 post HSCT. Long-term follow-up is needed post allogeneic HSCT even if done for benign conditions like SCD with no prior chemotherapy or malignancy history.

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Abbreviations:

HSCT	Hematopoietic stem cell transplant
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SCD	Sickle cell disease
AML	Acute myeloid leukemia
tAML/MDS	treatment related acute myeloid leukemia/ Myelodysplasia
DSA	Donor specific antibody
TBI	Total body irradiation
GvHD	Graft versus host disease
PO	Per oral
MMF	Mycophenolate mofetil sodium
GCSF	Granulocyte colony stimulating factor
PBSC	Peripheral blood stem cells
rBW	Recipient body weight
TLC	Total leucocyte count
ANC	Absolute neutrophil count
CBC	Complete blood count
BMT	Bone marrow examination
Ara-C	Cytosine arabinoside
SMN	Secondary malignant neoplasms
PTLD	Post-transplant lymphoproliferative disorder
EBV	Epstein barr virus
HSC	Hematopoietic stem cells
MAC/RIC	Myeloablative/reduced intensity conditioning
EBMT	European Society for Blood and Marrow Transplantation

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