

Ovarian Tissue Cryopreservation after initiation of chemotherapy

A female in her late teens with Acute Myeloid Leukemia (AML) was consulted on as an Inpatient for Fertility Preservation prior to chemotherapy initiation. Treatment start was urgent. Initial Chemotherapy treatment plan considered low risk to fertility: AAML1031 protocol, which includes Idarubicin, Cytarabine, and possibly Bortezomib. Unable to offer egg freezing due to urgent treatment initiation.

Patient proceeded with Lupron/Aygestin for ovarian protection during chemotherapy.

Some time passed, and the Fertility Preservation Clinic received notification that the treatment plan had changed due to the genetics of the leukemia. Patient now scheduled for an upcoming Bone Marrow Transplant, which would place her at high level of increased risk of fertility loss.

Patient had received 1 cycle of chemotherapy.

Decision made to proceed with ovarian tissue cryopreservation (OTC) after initiation of chemotherapy due to significant change in risk stratification from low risk to high risk for potential future infertility.

OTC completed after completion of 2 cycles of chemotherapy. 12 vials frozen, with 2 strips of ovarian tissue frozen per vial.

TAKEAWAY

Ovarian Tissue Cryopreservation can be performed for Fertility Preservation after initiation of chemotherapy. This should be performed as early in treatment as possible, to avoid high levels of chemotherapy exposure to the ovary, that could impact Fertility Preservation outcomes.

