

**FINDINGS:**

Peripheral smear was suggestive of 80% blastoid cells with bilobed nuclei, prominent nucleoli and moderate amount of cytoplasm. Few Auer rods and faggot cells seen. He

was thus soon started on Capsule ATRA (All Trans Retinoic Acid) followed 1 dose of Daunorubicin for cytoreduction; Prednisolone for DS (Differentiation syndrome) prophylaxis. His Immuno-phenotyping by flow cytometry for acute leukemia panel was suggestive of Acute Myeloid leukemia with monocytic differentiation. Thus, ATRA and Prednisolone were stopped and he was thus started on Venetoclax; Decitabine based chemotherapy regimen. His Polymerase chain reaction (PCR) for AML Multiplex Panel was negative however cytogenetic analysis by karyotyping showed 47,XY,+X,t(11;17)(q23;q21) (Variant Acute Promyelocytic Leukemia). FISH testing confirms retinoic acid receptor  $\alpha$  (RARA) (17q21) locus gene rearrangement. He was discharged in hemodynamically stable condition on 06/02/2025 and was planned for next cycle of chemotherapy after 2 weeks. Post 1 st cycle of chemotherapy bone marrow is in morphological remission; bone marrow flow measurable residual disease (MRD) is 1 %. Patient is clinically improving. As this case turned out to be a variant translocation instead of translocation 15;17, the patient was treated as high risk instead of classic acute Promyelocytic Leukemia. Thus knowledge of these translocations and its implications in treatment is decisive in outcomes.