

in complete hematological remission on day 26. The patient had experienced a series of severe complications during the induction therapy. Further management, patient got benefited from intensive induction chemotherapy with additional TKI maintenance therapy, then consolidation and allo-SCT. The authors proposed that presence of NPM1 mutation in the patient should be considered as a sign of AML rather than CML-BP. Therapeutic decisions must consider the broader clinical aspects, the comparatively mild side-effects of TKI therapy versus the great benefit that might bring to most of the patients, as our case history may incidentally demonstrate.(11)

RARITY OF THE CASE/ SIGNIFICANCE:

Only 8 such cases are reported in the literature, making the present case unique and rare. Therapeutic interventions needs to be explored for better clinical outcomes and to expand horizon on the disease prognosis.

NCCN Guidelines Version 3.2022 Acute Myeloid Leukemia states: In 2016, WHO expanded the recurrent genetic abnormalities to include two provisional categories, AML with BCR-ABL1 rearrangement and AML with RUNX1 mutation. AML with BCR-ABL1 rearrangement is a rare de novo AML may get benefitted from therapies that entail tyrosine kinase inhibitors. The presence of RUNX1 gene mutation on

Exon 9 was found to be variant of uncertain significance in the presence study, however, the presence of variant must be co-related with the clinical findings and for further therapeutic interventions.(12)

It can be difficult to choose a treatment when BCR ABL1 gene fusion and NPM1 mutations appear together in a rare circumstance. Larger cohort studies are needed to demonstrate the relevance of co-occurrence and therapeutic experience for better clinical outcomes. In the index patient we anticipate development of subsequent genetic alterations as a results of genomic instability to presence of the initial mutation. Hence, a through comprehensive work up is must in AML or there hematological neoplasms, may it be in newly diagnosed, in relapsed instances or while monitoring the disease type.