P15. MANAGEMENT OF THE PATIENS WITH CHRONIC MYELOID LEUKEMIA IMPACT OF NEW DIAGNOSTIC AND THERAPEUTIC METHODS.

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INTRODUCTION

Chronic myeloid leukemia (CML) is a clonal myeloproliferative disorder; the molecular hallmark of the disease is the BCR-ABL gene rearrangement which usually occurs as the result of a reciprocal translocation between chromosomes 9 and 22. Tyrosine kinase inhibitors (TKI) were the first drug that targeted the constitutively active BCR-ABL kinase and it has become the standard frontline therapy for CML. Monitoring the treatment of CML patients with detection of BCR-ABL transcript levels with real time qualitative polymerase chain reaction (RQ-PCR) is essential in evaluating the therapeutic response.

MATERIAL AND METHODS

At the Clinical Hematology and BMT Unit Tg-Mures between 2008-2014 we performed the molecular monitoring of bcr-abl transcript levels with RQ-PCR at 30 patients diagnosed with CML.

RESULTS

We have 16 patients on imatinib treatment who achieved major molecular response. One patient loosed the complete molecular response after 5 years of treatment. Five patients underwent allogeneic hematopoietic stem cell transplantation from identical sibling donors. One patient is in complete molecular remission after 9 years of the transplant. Six patients present positivity to Met351Thr mutation with increasing transcript levels. We performed the switch to the 2nd generation of TKI.

CONCLUSIONS

Because a rising level of BCR-ABL is an early indication of loss of response and thus the need to reassess therapeutic strategy, regular molecular monitoring of individual patients is clearly desirable.