Philadelphia Positive Acute Lymphoblastic Leukaemia (ALL): Clinico-Haematologic Characteristics, Molecular Analyses and 3-year Follow Up
—A Single Institution Study

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Abstract

Introduction: The Philadelphia chromosome is one of the commonest chromosomal aberration in adult acute lymphoblastic leukaemia (ALL) patients. We present the results of a 3-year prospective study to look at the clinico-haematologic, immunophenotypic, cytogenetic and molecular profile of 13 adult patients with Philadelphia (Ph) positive ALL out of 35 newly diagnosed ALL seen at our institution over the past 3 years. Materials and Methods: Thirty-five adult ALL patients seen between 1996 and 1998 comprised the study group. Marrow samples were obtained for immunophenotyping and karyotypic analysis at diagnosis. Samples were also obtained simultaneously for molecular testing for Ph chromosome. Results: Thirteen patients were found to be Ph positive by molecular analysis while cytogenetic studies identified the chromosomal abnormality in 9 of these patients. The median age of our Ph positive patients was similar to those without Ph chromosome. Pre-B phenotype appears to be common in this group of patients. In concordance with other studies, Ph positive ALL was associated with a poor prognosis in our patients. Conclusion: Identification of Ph chromosome is important in the management of patients with ALL as it is an important prognostic marker.

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