Article published online: 2020-12-21

Letter to the Editor

Chronic lymphocytic leukemia with deletion 17p: An Indian scenario

DOI: 10.4103/sajc.sajc_287_18

Dear Editor,

Deletion 17p (del 17p) is a rare genomic aberration found in patients with chronic lymphocytic leukemia (CLL). The incidence of del 17p varies from 5% to 9% in newly diagnosed patients with CLL while it is up to 50% in patients with relapsed/refractory disease.[1,2] The presence of del 17p correlates with poor response to standard treatment and unfavorable outcome.[3] There is a paucity of data from India regarding del 17p in patients with CLL, and hence, we planned this study. The aim of this study is to know the incidence of del 17p in Indian patients with CLL and their clinicohematological characteristics. This prospective study included consecutive treatment-naïve patients who were diagnosed with CLL and registered at the Department of Medical Oncology, Dr. BRA-IRCH, All India Institute of Medical Sciences, New Delhi, between June 2013 and May 2018. The diagnoses of CLL was based on the guidelines from the International Workshop on CLL.[4] The baseline workup included cinical and hematological parameters (complete hemogram, peripheral blood smear examination, and flow cytometry), routine biochemistry, lactate dehydrogenase, B2 microglobulin, IgVH mutation status, and fluorescence *in situ* hybridization (FISH) for del 17 p. 17p deletion was assessed by FISH in peripheral blood samples at diagnosis using the commercially available dual color Zytolight TP53/Cen17 probe as per the manufacturer's recommendations (Zytovision, GmbH, Germany). For each patient, at least 200 interphase nuclei were analyzed by Olympus fluorescence microscope (Japan). The positive cases were defined as having ≥7.5% of nuclei. Patients were staged according to the Rai staging system.[5]

Of the 140 patients recruited in the study, del 17 p was found in 16 (11.4%) patients. The characteristics of these patients are summarized in Table 1. Among the patients positive for del 17p, 10 patients received treatment for CLL at baseline while 6 patients were kept under observation. In the subgroup of patients who received treatment, four patients received bendamustine rituximab, one patient received fludarabine cyclophosphamide and rituximab, one patient received chlorambucil and prednisolone, and four patients received ibrutinib. IgVH mutation status was available in 10 patients (sequences with a germline identity ≥98% were considered unmutated), 8 patients were found to have unmutated IgVH.[6]

This study is the first study from India evaluating the incidence of del 17p by utilizing FISH technique. In our study, del 17p was found in 11.4% treatment-naive patients with CLL which is higher than that reported in the western

Table 1: Baseline characteristics of chronic lymphocytic leukemia patients with deletion 17p (*n*=16)

Base line characteristics	
Age (range)	53 years (35-75)
Males, *n* (%)	14 (73.33)
Females, *n* (%)	2 (26.67)
Hemoglobin (g/dL)	11 (6-14)
Total leukocyte count (×10⁹/L)	60 (42-380)
Absolute lymphocyte count (×10⁹/L)	52 (36-310)
Platelet count (×10⁹/L)	130 (40-420)
Clinical Rai stage, *n* (%)	
0	0
I	3 (18.75)
II	5 (31.25)
III	3 (18.75)
IV	5 (31.25)
Unmutated IgVH gene (*n*=10), *n* (%)	8 (80)

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literature.[1,2,7] This may be due to a referral bias at our center or may reflect a difference in disease biology. The patients with 17p deletion were younger (53 vs. 59 years), had more male predominance (7:1 vs. 3:1), high total leukocyte count (60,000 vs. 50,000/mm^3), and advanced disease (50% vs. 40%) at presentation when compared with the historic data from our institute.[8] This study is limited by unavailability of other cytogenetic abnormality by FISH.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Ajay Gogia, Ritu Gupta[1], Lalit Kumar, Atul Sharma, Lata Soni[1]

Department of Medical Oncology, [1]Lab Oncology, All India Institute of Medical Sciences, New Delhi, India

Correspondence to: Dr. Ajay Gogia,
E-mail: ajaygogia@gmail.com

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How to cite this article: Gogia A, Gupta R, Kumar L, Sharma A, Soni L. Chronic lymphocytic leukemia with deletion 17p: An Indian scenario. South Asian J Cancer 2019;8:40-51.