A Chronic Myeloid Leukemia with a Unique Variant Philadelphia Chromosome Translocation: t(9;22;19)(q34;q11.2;p13)

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Chronic myeloid leukemia (CML) is categorized as one of the myeloproliferative neoplasms, according to the World Health Organization (WHO) myeloid neoplasms and acute leukemia classification. The hallmark of this disease is the presence of a reciprocal translocation between the long arms of chromosomes 9 and 22 [t(9;22)(q34;q11)] which leads to the formation of the Philadelphia chromosome (Ph) and is present in 90%-95% of CML patients. In 5%-10% of CML cases, there are variants where one or more different chromosomes are involved in addition to chromosome 9 and 22.

We present a patient with newly diagnosed CML with a rare variant translocation involving chromosomes 9, 19 and 22. To the best of our knowledge, this is the first case study to describe a variant Ph chromosome translocation in chronic phase CML in Bahrain.