

## **Abstract:**

**CONTEXT:** Bone marrow (BM) biopsy is an integral part of staging work-up for non-Hodgkin lymphoma (NHL). **AIMS:** To study the characteristics of BM involvement in NHL with respect to incidence, histologic pattern and morphology of infiltration and its discordance with the histology of primary anatomic site. **SETTINGS AND DESIGN:** Forty-nine cases of NHL in which BM biopsy was performed for staging were included in this study, the primary site being classified according to the WHO classification for NHL. **MATERIALS AND METHODS:** A prospective study of 49 cases was conducted. Bilateral BM biopsy was obtained from the posterior superior iliac spine. The biopsies were fixed in 10% buffered formalin solution and decalcified using 10% formal - formic acid for 4 - 6 h followed by routine processing. The serial sections were stained by hematoxylin and eosin and reticulin stains. **RESULTS:** BM biopsy showed involvement by lymphoma in 27 cases (55.10%). Unilateral positivity was found in four cases (14.81% cases). The overall incidence of marrow involvement by NHL was 55.1%. The incidence of involvement was higher in T-cell lymphomas when compared with B-cell lymphomas and predominant pattern of involvement was mixed. Diffuse large B-cell lymphomas had the lowest incidence in all the B-cell lymphomas. A discordant histology between BM and primary anatomic site was found in 29.63% (8/27) of the cases, where it was seen more in follicular lymphomas and diffuse large B-cell lymphomas. **CONCLUSIONS:** Critical examination of BM biopsies can increase the diagnostic accuracy, thereby contributing to the prognosis and appropriate treatment modalities.