Abstract:
The trephine bone marrow (BM) biopsy is an important diagnostic tool in patients with malignant lymphoma. BM examination can serve to establish or confirm a primary diagnosis of lymphoma or to determine the extent of disease dissemination for staging purposes. BM histology renders information which cannot be gained equally from aspirate material, such as spatial distribution and extent of infiltrates, BM cellularity and fibrosis. Furthermore, cytology including flow cytometric immunophenotyping can give false-negative results in BM involvement by lymphoma due to intralesional fibrosis. In addition to morphological examination, the availability of a broad panel of antibodies suitable for paraffin-embedded tissues, in conjunction with less damaging decalcification procedures, nowadays enables us to perform complete immunophenotyping on BM trephines and allows for classification of lymphoma infiltrates according to established algorithms. Molecular determination of clonality and interphase fluorescent in situ hybridization can be employed selectively to resolve difficult cases. This review describes important diagnostic features of malignant lymphoma in the BM, relevant differential diagnoses, and the proper use of ancillary techniques.

Stichworte:
Bone marrow; Immunohistochemistry; Molecular pathology

Zeitschriftentitel:
Pathobiology