Pathological examination of biopsy and bone marrow aspiration in adult patients referring to hematology clinic of Imam Khomeini hospital among 2010 – 2014.

Abstract:

Introduction: Hematopoiesis is a process which various blood elements are produced. Hematopoietic system is constantly going through a cycle of evolution and in this process a primary stem cell develops into different cell types. The whole procedure is done in bone marrow. With attention to the high cellular turnover in bone marrow incidence of different benign and malignant disorders are probable. Bone marrow aspiration and biopsy is a valuable process in diagnosis of this disorders. This study aims to collect comprehensive information of benign and malignant disorders to create a clear vision of the prevalence of different types of the disease among patients referred to the Hematology Clinic of Ardabil.

Materials and Methods: In this cross-sectional study, bone marrow aspiration and biopsy data of all patients referred to Imam Khomeini hospital hematology clinic of Ardabil were collected and statistically analyzed. Finally, outcomes organized in the form of tables and graphs and presented in a comprehensive report.

Results: In this study it was found that aspiration and biopsy samples sent to the laboratory of Pathobiology, mostly is normal in most cases. ITP and anemia were identified as the most common benign disorders. Then it became clear that although the prevalence of premalignant diseases is not high but thrombocytopenia is the most common premalignant disorder. Reviews showed, the prevalence of CLL is markedly higher than other malignant cases.

Conclusions: No similar studies with this sample size is done in the province yet. In most cases, the obtained prevalence in the current study is matched with data in global references and similar studies. Totally no outcome in current study was Contrasting with the obtained results of other similar studies.

Keywords: Aspiration, biopsy, bone marrow hematopoiesis, hematology