

supports what is written about the close relationship between the marrow fibrosis and megakaryocytes, and the role of the megakaryocytes-derived growth factors in the pathophysiology of IMF<sup>[13,17,20]</sup>. The marrow sinusoids are usually distended and contain hemopoietic cells. Bone trabeculae may be widened and residual fat cells may be seen in both cellular and fibrotic phase<sup>[8]</sup>.

The quantitative evaluation of bone marrow biopsies also revealed that there is a progressive reduction of hemopoietic tissue, increase in fatty tissue, fibrous tissue, OBI, TBW and blood vessels with increasing stage of IMF. This was in accordance with two earlier studies by Burchardt et al in 1982, and 1984<sup>[13,14]</sup>.

Increase number of MKCs with progression of the disease was a constant and a very highly significant finding in our study, which is consistent with previous findings reported by Jalal in 1988 who showed that collagen fibrosis was found in 86% of patients reviewed and megakaryocytes increased in numbers with tendency for clustering and abnormal morphology<sup>[21]</sup>.

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