Bone Marrow

Normal bone marrow consists of a meshwork of vascular elements and fibroblasts with hemopoietic tissue in the interspaces. It serves not only to produce erythrocytes in astronomical numbers, but also platelets, monocytes, granulocytes and lymphocytes. It also is a graveyard for worn out erythrocytes and serves as part of the immune system.

Marrow fibrosis can occur as a result of a number of conditions; common ones are radiotherapy and inflammatory processes.

Marrow spaces (arrows) showing a small focus of active hematopoiesis.
Mandible showing marrow fibrosis. This patient had received a full course of irradiation therapy. All semblance of normal marrow is replaced with fibrous tissue (arrow).

Bone, osteomyelitis, acute. Bacteria are present in clumps (small arrows) and fibrous tissue has formed in marrow spaces (large arrow).
Bone marrow, normal. A polymorphous population of erythroid and myeloid cell precursors is present.