

white-cell formation the term leucoblastic is applied. In either case there are three main features present: (a) redness up to a prune-juice colour; (b) paucity of bone trabeculae (41.711²); (c) abundance of marrow tissue (41.711³). The second and third points are interdependent. When the bone is cut open, the marrow tissue is found soft and tends to run or ooze out beyond the surface of the cut, while the scarcity of bone is evidenced by the ease with which a knife-tip or the finger-nail will indent the central parts of the bone. In 41.711⁵ and 41.711⁶ the abundance of the marrow tissue is the more striking because the compact layer is very much thinned out, and the sternum appears much thicker than usual owing to the large amount of red-coloured tissue between the opposite surfaces.

Increased formative activity is not always associated with redness, as shown in 41.711³, where the tissue is pale; and 41.711² and 41.711¹⁰, where the cut surface is brightly mottled with red and yellow. Paucity of bone trabeculae, however, is always characteristic, as well as the third point—that of abundance of marrow tissue.

It is not possible to decide by the naked eye between a leuco- and an erythro-blastic reaction; 41.711¹¹ and 41.514¹, for instance, do not appear to be very different. The terms were obviously introduced with the study of this tissue under the highest powers of the microscope, and cannot be expected to coincide with naked-eye characters.

It has been found convenient in this Catalogue to designate all these marrows as 'hyperplastic', since, in a general way, all of them are of this nature.

Diminished formative activity may be dependent on definitely atrophic conditions, or may be the result of degenerative processes. Inhibition of formation may also arise under the influence of certain morhific agents. The distinctive features are different in the two cases. In atrophies, the bony trabeculae are scanty, so that the cut surface of the bone is very decidedly honeycombed. But more than that, hardly any marrow substance is found to be present, inasmuch as the honeycomb-like spaces appear empty. In other cases, the atrophy of the marrow is associated with a preponderance of bony trabeculae, the cut surface being highly resistant to knife-tip or finger-nail, and the pits in which the marrow lies are found to be very minute. This condition amounts to one of sclerosis of bone, and is due to inflammatory causes, or may be part of a general senile tendency to ossification of connective tissue. It is easy to see how premature sclerosis may destroy the available space for marrow tissue, and so interfere with recovery