Examination of Bone Marrow for M. Leprae.

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This report is based on the microscopic examination of the bone marrow of 69 cases of leprosy in the Chandkhuri Leprosy Hospital. Most of the material was gotten from necrosed bone which had to be removed surgically. The remainder was gotten from post-mortem material. The bones examined included the phalanges of the upper and lower extremities, metatarsals, radius and ulna, and tibia. The investigation was carried out taking as a basis the fact that M. leprae has been found in abundance in the cells of the reticulo-endothelial system.

To ensure against the factor of extraneous contamination, the cut end of the bone to be examined was always cleaned with antiseptic fluid and the marrow removed by means of a probe. To be very sure, we took a tibia, cleaned the bone thoroughly, immersed it in spirit for 48 hours; then made a fresh cut with a clean saw, and removed the bone marrow by means of a probe. This upon examination showed M. leprae in practically every field. Slides and instruments were always scrupulously cleaned before examining any material.

The bone marrow of seventeen out of twenty-one mixed cases (cutaneous and neural) was positive for M. leprae. Three of the four that were negative were from smears taken from phalanges or parts of phalanges, and one from a metatarsal. Of the forty-eight cases which were classified as neural not a single smear of bone marrow was positive for acid-fast bacilli.