CONGENITAL ABSENCE OF THE FEMUR: REPORT OF FIVE CASES

B. E. McKenzie, B.A., M.D., Toronto.

Bone defect, or actual absence of an entire bone, or of bones, at birth, is not very uncommon. Because the condition greatly disables the patient in some instances it is one of great importance. The etiology is shrouded in mystery. Nothing satisfactory by way of explanation is known to the writer. Four causes have been assigned with more or less coloring of satisfaction.

1. Maternal impressions.

- 2. Intra-uterine constriction by uterine bands, or from the cord.
- 3. Local arterial disease; or

4. Some deficiency in the germ.

From the point of view of a practical or clinical paper these may be passed without comment. Of the various long bones the radius is most frequently absent. Next in order of frequency are the fibula, tibia, ulna, femur and humerus.

Hoffa, in his Orthopadische Chirurgie, published 1894, found of the radius, 53; of the fibula, 45; of the tibia, 38; of the ulna, 6, cases. He makes no mention of the congenital absence of the humerus or femur. Other writers on orthopedic surgery make but slight reference to the subject, the literature being found only in scattered articles in medical journals. In the New York Medical Journal of Feb. 20th, 1897, the writer published the reports of ten cases (with dissections) comprising absence of the following bones—radius, ulna, tibia, fibula, ribs and metacarpal bones. At that time he had not seen any cases of absence of the femur.

In such cases treatment naturally falls to the lot of the orthopedic surgeon. The fact, which is generally true, is manifest here, that very little relatively can be done to benefit the upper extremity by surgical intervention, but the lower is quite amenable to treatment.

When the defect in the upper extremity is such as to greatly disable a member it is possible in some instances for art to improve the condition, but seeing that the kind of action called for pertains to the finer and more delicate movements, artificial aids must be disappointing. In the lower extremity, however, a useful member in most cases can be secured by the aid of prothetic appliances.