

Original Communications.

Remarks on Club Foot. By WILLIAM H. HINGSTON, M.D., L.R.C.S.E., &c., Surgeon St. Patrick's Department Hotel Dieu Hospital, Montreal. Read before the Medico-Chirurgical Society of Montreal, March 24th, 1876.

Club foot is met with as a congenital and a non-congenital affection.

As a congenital affection—moulded and fashioned in the mother's womb; as a non-congenital one,—arising from some early disturbance of the prima via; some disturbance of the nervous centre; some irritation at the peripheræ.

The non-congenital are said by writers to be the more frequent, and tabulated reports average them as three to one in frequency. I give the statement, though my own experience does not corroborate it. The degree of deformity varies as the kind—sometimes so slight as to pass without notice; this is very frequent. Sometimes the deformity is such that the foot may be strongly inverted or everted—the foot itself so shortened that the toes are necessary at the end of shortened legs to show that a foot was intended.

The four varieties of club foot are well-known to you: Equinus; Varus; Valgus; and Calcaneus: and the four sub-varieties, Equino Varus; E. Valgus, Calcaneo Varus; C. Valgus.

The immediate causes of Talipes, of whatever form or degree, whether intra-uterine or occurring after birth, are the same—"alterations in the relative position of the bones, in consequence of irregular muscular action, position, pressure, &c." The *remote* cause is often matter of conjecture.

Irregular muscular action occurs, methinks, most frequently *after* birth, but the deformity arising from malposition, or from pressure, occurs most frequently during intra-uterine life.

The belief that deformities arise from arrest of development in the bones themselves is no longer tenable, although it still serves as an excuse for the non-fulfilment of a rashly-made promise of perfect cure.

It is not my intention to enter at all into the question of non-genital Talipes. Far more than I could give may be found in any systematic work on Club Foot. Nor is it my intention to speak of the various contrivances which have been, and are still, used to remedy this deformity. My object is to speak of certain rules of practice observed by writers,

and to suggest such modifications of them as I have been led to adopt in hospital and private practice.

As they relate to operative interference in congenital cases, I may premise them by stating that medical practitioners are oftentimes deterred from resorting to the *tenotome* by a dread of something untoward, something unpleasant which might, and which does sometimes occur. Let us analyse these, and what are the inconveniences of a character to deter that may arise from the division of a tendon?

1st. The irritation of the wound; but this is so slight, so insignificant, as to be readily healed.

2nd. Hæmorrhage. Since my first case in 1854 I have never had loss of blood to the extent of twenty drops; rarely half that quantity; commonly but one, two or three drops.

3rd. Inflammation—But this can only arise in clumsily performed operations, either from forcibly bruising the part while holding it, or from an unclean knife, or from the unnecessary admission of air.

4th. Non-union of the divided ends of the tendon. It is the dread of this contingency which deters many from resorting to a really harmless procedure. I have seen but one instance of a non-united tendon after tenotomy—and *not* the mode of its performance—*not* any peculiar diathesis in the child—*not* any indisposition to pour out, in and around the cut ends, the needful blastematous material; but the simple fact that the cut ends were at once separated, and kept too widely asunder, by some mechanical contrivance.

5th Adhesion after the operation to adjacent structures.

If the non-uniting of a tendon is, as I have just said, due to meddlesomeness, or clumsiness, *after* the operation, adhesions to adjacent structures are mainly, if not altogether, due to the *mode* of operating. If the skin over the tendon be wounded in more than one place; if, in addition to a puncture at entering, and another at a point opposite, where there should be none, the skin be shaved or split, as sometimes happens, adhesions will probably occur. If, in addition, a very sharp instrument be used, and the tendon, with its investing sheath, be cut cleanly through, then adhesions will almost certainly occur, and adhesions of a character, perhaps, to interfere with the free play of the divided tendons. If, on the other hand, the knife be insufficiently sharp and the surrounding tissues be much handled and disturbed the same result may follow. But this cannot be regarded as a reason for not operating any more than should the puncturing of a flap, the irregular