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DUPUYTREN'S FINGER CONTRACTION.



OPERATION BY REMOVAL OF THE CONTRACTING BAND BY OPEN WOUND.

IMMEDIATE CURE WITHOUT REACTION OR PAIN.

BY

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DUPUYTREN'S FINGER CONTRACTION. OPERATION BY REMOVAL OF THE CONTRACTING BAND BY OPEN WOUND. IMMEDIATE CURE WITHOUT REACTION OR PAIN.

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[Read September 11, 1889.]

The patient was a medical friend, aged thirty-eight. His father had contraction of one great toe. Repeatedly in earlier life the patient has had more or less rheumatism in his shoulders for a few days at a time. At eleven years of age he cut the peroneal muscles of the left leg with an axe, and, soon after this, trouble with his left leg set in. The division of the peroneus longus made his ankle unstable, and his foot is apt to be inverted in consequence of the loss of support on its outer side. There is also a markedly exaggerated arch of the foot with contraction of the plantar fascia. Whether this is the direct result of the muscular injury is somewhat doubtful. He has also suffered during the last two years considerably with eczema of both hands and of the body.

At the age of twenty-eight he noticed a depression in the palm of the left hand in the axis of the middle finger. Contraction, with thickening of the fascia and the formation of a distinct cord, began from one to three years later.

June 1, 1889. The first joint of the left middle finger is flexed one-third, the first phalanx alone being involved. The palmar cord is very marked; it extends just to the base of the phalanx. At its digital extremity two lateral bands extending to the fore- and ring-fingers have recently begun to form, threatening contraction of these two fingers.

The hand having been prepared antiseptically, I made an incision two and one-half inches long, half an inch over the first phalanx of the finger and two inches in the palm. The skin was reflected on each side, exposing the band, and at its lower end the two lateral slips. The flaps of skin though thin bled very freely, which I was glad to see, as it insured them against any possible gangrene. The cord was entirely excised, care being taken to remove very thoroughly also the two lateral slips to the fore- and ring-fingers, as well as the main cord. The flexor tendons were seen in the common sheath beneath the fascia, but no injury was done to either sheath or tendon. A few horsehairs were used for drainage. An ordinary dry bichloride dressing was applied and the hand was bandaged. No splint was used, nor was the subsequent

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discomfort sufficient to require the hand to be held in a sling. In eight days the sutures were removed and the wound was well. But little stiffness of the fingers followed the operation, and entire flexibility of the hand and mobility of the fingers were very quickly restored. To facilitate this, the hand was soaked daily in hot water and anointed with cosmoline.

Remarks.—In a somewhat elaborate article on Contractions of the Fingers in Buck's Reference Hand-book of the Medical Sciences, vol. iii. p. 157, I have enumerated at the end the various methods of surgical treatment applicable to these cases. These are: first, the operation by subcutaneous multiple divisions of such bands; and secondly, by open wound.

The method of subcutaneous multiple divisions was strongly and admirably advocated and elaborated by Mr. William Adams, of London, and has been the method which I have usually adopted, and with very good ultimate results. But it has been followed, in two cases, at least, by considerable recontraction, and has the disadvantage of being very painful and prolonged in recovery. The apparatus which is required in this method is rather costly, and by its pressure at various points, is very apt to induce considerable ulceration, and even if this does not occur it produces a very marked degree of pain for a number of days. Not seldom the patient is obliged to wear the apparatus for a number of weeks, if not months.

The methods by open wound can practically be reduced to two—that of Goyraud and that of Busch.

In Goyraud's method, the one that I adopted here, a simple longitudinal incision is made down to the fascia, with, if necessary, two small transverse incisions at the two extremities. The skin on each side is separated from the fascia, exposing the bands or cords very clearly and entirely. These cords may then either be thoroughly divided transversely at as many points as are necessary to allow of complete extension, or they may be, as I decidedly prefer, entirely excised. The great advantage of this method is that one can see exactly all the bands, and know exactly what is done and that it is thoroughly done. Moreover, the longitudinal incision in the skin does not tend to gape when the finger is extended.

In Busch's method, a triangular flap of skin with as much subcutaneous tissue as possible is dissected over the palmar cord, the base of the flap being at the web of the finger, its apex at the wrist end of the cord. The exposed band of fascia, equally well seen in this method as in the last, is then divided by slight cuts of the knife, together with every tense fibre that on stretching the finger acts as a hindrance to

complete extension. The triangular flap, of course, retracts strongly, leaving a Y-shaped wound to heal by granulation, which requires three to four weeks, assisted, if need be, by skin-grafting. The edges of the wound, it is true, may be approximated by sutures to facilitate healing; but no tension must be produced in the flaps in bringing them together, nor any attempt to extend the fingers be made till the granulations have appeared.

Busch's method, in my opinion, has no advantage over the other, and as the wound has to heal by granulations it heals very much more slowly, and is, therefore, less desirable than the simple longitudinal incision of Goyraud.

In the present case no pain of any moment and no fever followed the operation. Even a splint was not required, nor was it necessary to carry the hand in a sling. All of the painful pressure and extension of the parts required by Adams's subcutaneous method were avoided, and almost without any treatment the fingers resumed their flexibility in the course of a short time, the wound itself being entirely well in eight days.

