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DIVISION OF THE TENDO ACHILLIS IN CERTAIN INJURIES ABOUT THE ANKLE.

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MR. C., a laborer, aged forty-five, fell from a step two or three feet high, striking on the pavement upon his left side. He was brought immediately to the hospital. On examination he was found to have a fracture of the left fibula, an inch and a half from its lower extremity. The symptoms were crepitus, increased mobility, and local tenderness. The foot was dislocated on the tibia backwards and outwards, as was indicated by an undue prominence of the heel behind, of the lower end of the tibia in front, and by inability to flex the foot to a right angle. The internal lateral ligament was partially ruptured, giving a deformity not unlike that seen in equino-valgus.

The leg was placed in a fracture-box, but all efforts to remove either the lateral or the antero-posterior deformity were unsuccessful. On the fifth day the patient was etherized, and renewed but unsuccessful efforts were made to remove the deformity. The tendo Achillis was now divided, and the foot easily restored to its natural position. The leg was replaced in the fracture-box; the foot was kept at a right angle to the leg by means of the foot-piece, and the lateral deformity removed by side pads.

The subsequent treatment gave very little trouble to either patient or surgeon. The straps and pads required adjusting only once in two or three days, instead of two or three times a day, as before the tenotomy. The patient suffered no pain whatever after the operation.

He was discharged five weeks after the injury. He could walk at this time without a cane, and had only a slight limp. The foot was in its normal position, the tendon firmly united; the motion of the ankle-joint was fair, and rapidly improving. There was no pointing of the toes to prevent him from placing his foot directly under him with the heel upon the ground, and taking a natural step.

Four months after the accident the patient reported himself well. He could walk as well as ever, and said the injured limb was nearly as

strong as the other. There was neither swelling nor deformity. Recovery was complete.

Fractures at or near the ankle are apt to be followed by impaired motion, which may last for weeks or even months after the original lesion of bones and ligaments is repaired. The same is also true of dislocations of the foot, whether accompanied by fracture of the bones of the leg or not.

In all of these cases of injury in the vicinity of the ankle-joint there is a marked tendency in the foot to point downwards; and unless this tendency be corrected in season, the convalescence may be long and tedious. This is due to the fact that, as the patient's foot is ankylosed at an obtuse angle, he cannot put it under him parallel with the other, when standing on the sound limb. On the contrary, he carries or pushes it along in front, bearing little or no weight upon it, until the impairment of motion is so far removed as to allow flexion of the foot to a right angle with the leg. It is only when the foot is in this position that the patient can place his heel squarely upon the ground, opposite the other, and take a natural step. He cannot do this when the foot is fixed in an extended position.

If care be taken during the treatment of these cases to keep the foot flexed at a right angle, when the patient gets able to stand on the well leg, he can swing the other under him, the foot clearing the ground without any abduction. The heel can be placed in its natural position upon the floor, so that all parts of the foot shall bear their due share of the weight. The patient will get upon his feet sooner, and in most cases walk more easily than he would be able to do were the foot not in this position. The exercise in walking takes the place of passive motion, and is much more effectual in removing the impaired motion of the articulation.

To retain the foot in this flexed position is not infrequently a difficult matter. It requires a constant and in many cases a considerable force, to overcome the tendency of the foot to point downwards. Division of the tendo Achillis allows the foot to be placed in its normal position and easily kept there. This is a safe, easy, and effectual procedure. The subsequent treatment is more comfortable to the patient, and easier for the surgeon. We have known of its being done in several cases of fracture or dislocation near or at the ankle, and with good results in every instance. Mr. Bryant recommends the operation in these words: "When the fracture (of tibia and fibula) is close to the ankle-joint, and any difficulty is experienced in keeping the broken bones in position, from the spasmodic action of the tendo Achillis, the tendon should be divided, this simple operation at once allowing the surgeon to adjust the parts with admirable facility, and rendering the retentive apparatus of real value, while it also allows natural processes of repair to go on uninter-

ruptedly, the divided tendon and broken bones undergoing repair together without a drawback."¹

There is no reason to fear a non-union of the divided tendon, for an ununited tendo Achillis is almost an unheard-of event. Gross never saw nor heard of a case. William Adams² never saw but one case, and in that the tendon had been cut immediately behind the inner malleolus, a point which ought never to be selected for the operation.

From the evidence we have been able to obtain, it would seem that in all cases of tibio-tarsal dislocation, and of fracture of tibia and fibula in the vicinity of the ankle, when the deformity cannot be readily removed, and the parts kept in their normal position, division of the tendo Achillis is a safe and justifiable operation. The injured parts can thereby be kept in a better position, the treatment is less irksome to the patient and the surgeon, the tendon heals as soon as the original lesion, and the patient walks sooner, and with less difficulty, being able to get upon his feet at the earliest possible moment. He recovers with as good a limb, and in many cases has a shorter and more comfortable convalescence.

REMOVAL OF THE OS COCCYGIS FOR COCCYODYNIA.³

[REPORTED BY J. C. IRISH, M. D., OF LOWELL.]

MISS C., forty-four years old, an unmarried seamstress, at the age of fifteen received a fall, whose force came upon the coccyx. The injury was immediately attended in the vicinity of the bone with great pain and soreness, which, however, after a few weeks measurably though not entirely subsided. Four years afterwards, while engaged in her avocation, she began to suffer from neuralgia affecting all the pelvic organs but more especially the anus and rectum. The sitting posture greatly aggravated the pain, as did any movements calling into exercise the muscles attached to the coccyx. Defecation was attended with extreme suffering. Menstruation was regular and normal, except that it was attended with severe neuralgia, referred mainly to the rectum. The patient suffered constantly from pain and tenderness, involving all the pelvic viscera. The several physicians under whose care the patient had placed herself could afford her merely slight and temporary relief, although all the ordinary remedies for neuralgia received a thorough trial.

At the time of examination by Dr. Burnham, January 23, 1875, he found extreme tenderness over the coccyx, the two lower segments of

¹ Practice of Surgery, page 873.

² Club-Foot, page 37.

³ Under the care of Walter Burnham, M. D., of Lowell.