Clinical Notes.

A RARE CASE OF FRACTURE OF THE HUMERUS.

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The following notes, from memory, of an exceedingly rare variety of fracture, may be of interest to some of the readers of this Journal:

In August, 1903, I was called to see Major S., who had fallen about twenty minutes before, sustaining an injury of the right shoulder. On examination no perceptible alteration in the outline of the shoulder could be noticed, but the whole shoulder was, perhaps, a little swollen. The relation of all the bony parts was normal. Voluntary abduction was present to some extent, but caused great pain, which was also caused by pressure over the humeral head. On further examination a groove could be distinctly felt with the finger, running vertically downwards over the front of the humeral head for more than an inch. On pressing the finger into this groove, the outer edge of it seemed to be slightly movable, and intense pain was elicited. Bearing in mind the danger of breaking down any remaining attachment in cases of fracture about the humeral head, very little manipulation was attempted. Careful passive movement elicited an undoubted crepitus, felt by a finger of the left hand, in the groove. A careful consideration of the only signs present, viz., crepitus, and the presence of this groove, with apparent slight mobility of its edge, led to a diagnosis of fracture of the great tuberosity of the humerus without rupture of the extension of the capsular ligament, the fibres of which thus prevented displacement, as the only one which would fit all the facts of the case. The arm was put up temporarily in a right angled wooden splint, applied to the inside, supplemented with a shoulder cap of leather. A couple of days later, finding this splint rather uncomfortable, and bearing in mind the probable uselessness of a shoulder cap in such a case, a right-angled splint, made of perforated zinc, was carefully fashioned in such a manner that it was applied to the internal aspect of the arm and the under aspect of the forearm when the latter lay across the chest with the thumb upwards. This splint, well padded, proved exceedingly satisfactory, and gave great comfort to the patient. About the third day, at the anterior axillary fold and spread downwards along the inner aspect of the arm and upwards to the acromion and clavicle, the shoulder was greatly swollen, but was quickly reduced by surface massage. About the ninth day the patient proceeded to Bloemfontein, and a skiagram was
there taken, which showed a semilunar cap of bone, representing the
great tuberosity completely separated from the upper end of the humerus
by an interval of about a quarter of an inch. The fragment was in no
way tilted, and completely bore out the diagnosis made. It is, I expect;
still in Major S.'s possession. After his return from Bloemfontein
passive motion was carefully commenced, and the range gradually in-
creased. At the end of the third week the splint was dispensed with,
and a sling substituted; movements in every direction, especially upwards,
being continued. When last heard from, about six months after the
accident, there was complete use of the arm, but, as was expected, the
overhead motion was greatly restricted, presumably owing to the jamming
of callus against the projecting acromion.

On reviewing the scanty literature upon this subject to which I have
had access, I find that the case differs somewhat from some of those
previously recorded, in several of which the diagnosis was only made
post mortem years later. The injury is generally understood to be caused
by direct injury to the shoulder, and Hamilton mentions two such cases,
one of R. W. Smith's, and one of his own. In the present case the injury
was plainly due to indirect violence, and most probably to muscular
action. The dorsal surface of the second phalanges of the right hand
were abraded, showing that the fall had taken place upon the more or
less clenched hand. The fracture had apparently occurred through the
powerful pull of the muscles attached to the great tuberosity in involuntary
protective action. Gurlt reports a similar case of his own, in which he
attributes the injury to muscular action, and Stimson, in the 1883
edition, describes a case of his own, which he believes was caused in a
similar manner. In the latter case there was no displacement, owing, as
he suggests, to persistence of periosteal or tendinous attachments. The
signs of these cases were similar to the present case, but I should be
inclined to lay more stress upon the groove, which was present in this
case, as a diagnostic sign than upon any other, and its value in this
connection has not previously been mentioned.

TWO CASES OF TRAUMATIC ANEURISM FROM GUNSHOT
WOUNDS, TREATED IN A STATION HOSPITAL, SOUTH
AFRICA. OPERATION. RECOVERY.

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Case I.—F. E., a Boer prisoner from Beyer's Commando, was
admitted on March 19th, 1903, to No. 22 Stationary Hospital, Pieters-
burg. He had a large tumour in the upper part of the right thigh.
He stated that this was the result of a bullet wound received at Mara,