Clinical and other Notes.

UNUSUAL CASE OF FRACTURE OF TIBIA INVOLVING KNEE-JOINT.

BY CAPTAIN W. B. SWETE-EVANS.
Royal Army Medical Corps.

Pte. J. B., aged 24, was admitted to the Military Hospital, Belfast, on June 10, 1924, with his left knee swollen to the size of a Rugby football, and so tense that no bony points could be identified, save the patella, which seemed partly dislocated outwards. There was a large abrasion above and
outside the knee in the lower third of the thigh. He gave a curious
history. He was playing in a "Soccer" match, and was almost in the
goalmouth when he slipped and fell with his leg bent. The goalkeeper
jumped in the air to punch away the ball and came down on the outer side
of Pte. B.—'s thigh, just above the knee. An X-ray was taken imme-

![Fig. (b).](image)

diately after admission (Fig. (a)). This showed a vertical fracture, or rather
fissure, of the tibia, extending from the knee-joint, on the outer side of the
crucial ligaments, about three to four inches down the shaft of the tibia,
with pieces of bone wedged in the fissure.

The leg was placed between sandbags on a pillow. On June 16, 1924
(six days after the accident) on the advice, and with the help of Colonel A.
Fullerton, Consulting Surgeon to the Northern Ireland District, the knee was opened with a long vertical incision on the outer side of the tibia over the fissure. A great deal of blood and mashed bone was expressed, and a piece of bone was found about 1½ in. square, with part of the semi-lunar cartilage attached, wedged firmly in the fissure.

This was evidently part of the articulating surface of the tibia.

With great difficulty this piece of bone was levered out, and two 2½-in. screws were inserted from without inwards in an attempt to close the fissure. After much trouble, owing to the screws failing to bite in the cancellous tissue, the fissure was almost closed and the wound was sewn up. An X-ray photograph was taken at once (Fig. (b)) and the patient put back to bed on a McIntyre’s splint. He suffered from some degree of shock and was given pituitrin (one cubic centimetre) every four hours. His temperature next morning was 100.2, pulse 100, and he had a troublesome cough. The pyrexia lasted for three days, but fell to normal on the 20th. The knee gave little or no pain.
The stitches were removed on the tenth day (wound healed by primary union), and on the same day the splint was taken off and passive movement started with gentle massage. He got up in a chair just four weeks after the operation. The knee-joint could only be flexed through about an angle of thirty degrees, and on July 24, 1924, and again on August 9, 1924, the joint was forcibly moved under general anaesthesia and a great many adhesions broken down. Massage and passive movements were continued twice a day.

Since then progress in movement has been most satisfactory, and he can now walk well up and down stairs, without a stick, and bend the knee to an angle of forty degrees (fig. (C)). The accident is a most unusual one, and apparently the outer condyle of the femur was driven by the blow of the goalkeeper's boots so violently against the upper surface of the tibia that it not only fractured that surface, but drove the fragments into the tibia, whilst splitting it vertically.

The patient has now gone on leave for two months, with every prospect of being able to continue his military services on his return.

NOTES ON A CASE OF CONGENITAL ABNORMALITIES OF THE BLADDER AND KIDNEYS.

By Captain R. W. Swayne, O.B.E.

A healthy primipara, aged 20, was delivered normally in July, 1924, of twin boys. One of the infants was healthy and continues to thrive, the other only lived a few minutes and is the subject of this report. Post-mortem examination: Male child, lived a few minutes after birth. Maturity about forty weeks. Weight 5 lb. 11 oz., well nourished generally except for the abdominal wall which is poorly developed and is flabby, but is quite intact. A condition of club hand is present in the left upper extremity, the hand being acutely flexed but both the radius and ulna are present. Both feet are in the position of talipes equino-varus. The lungs show very little signs of inflation and for the most part sink in water. There are about two ounces of reddish coloured fluid in the right pleural space. The heart is normal. On opening the abdomen a few ounces of free fluid were found. The liver, spleen, stomach and intestines appear to be normal. The left kidney is very small, measuring 1/2 inch in the long axis, there is a cyst of the left ureter at its entrance to the bladder. The actual kidney substance on the right side is less than that of left but there is a cyst measuring 1 1/2 inches in diameter attached to its outer side. There is also a small cyst of the right ureter in the corresponding position to that on the other side. The bladder is enlarged and presents marked hypertrophy. At its thickest part the bladder wall measures 1/2 inch. About the middle