of fairly long standing, additional measures may be necessary, and in the presence of deformities surgical intervention will be called for. With these exceptions, the scheme of treatment is identical with that for the foot which was trouble-free before joining the Army, and the results should be equally good.

As regards deformities, after the orthopædic surgeon has corrected the hammer-toe or over-riding little toe, after he has dealt with claw toes by tenotomy or, in selected cases, by arthrodesis of the phalanges, after the chiropodist has excised all corns and callosities, then the stage is set for intelligent physiotherapy to play its part in returning the recruit to duty, his feet in better shape than ever before. This type of case offers plenty of scope for collaboration between the orthopædic surgeon and the physiotherapist, and, if sufficient time is allowed, the results can be brilliant.

Early hallux rigidus, in which bony changes are absent, can often be improved by treatment with hot wax, gently increased passive stretchings, and gently progressed resisted and active exercises, while any degree of elevatus of the first metatarsal is corrected by training the peroneus longus to plantar-grade the foot.

Fibrositis, which usually occurs in the plantar fascia, should be treated by infra-red and massage to localize the nodule, after which the injection of 1% procaine usually effects a cure.

The majority of cases of the types which I have just described should, after a full course of physiotherapy, be able to resume their military training in their original grade. Of course, we are bound to meet with disappointments, and among these will be the valgus foot secondary to a short tendo Achillis. If this shortening is considerable, neither raising the heel nor concentrated physiotherapy will avail, and regrading to a lower category will be necessary.

SUMMARY

There is no place in the Army for the soldier with painful feet, and our task is to return him to his unit in the shortest possible time with his feet so sound that there is no likelihood of their breaking down again. This can only be achieved by strict attention to the following points:

(1) The soldier with painful feet is suffering from a major disability which must be treated as such, and he must therefore be admitted to hospital. Out-patient treatment is unsatisfactory.

(2) In most cases preliminary rest in bed will be essential.

(3) Individual treatment is absolutely necessary until all mechanical errors are corrected.

(4) Sufficient time must be allowed in hospital for the soldier's feet to recover. This will take four to eight weeks. Allowing insufficient time will only result in failure.

(5) Full and intelligent co-operation from the patient is required.

(6) When up and about, Army boots should be worn whenever possible. "Slopping about" in plimsolls is harmful.

(7) The regimental M.O. should never regard a painful foot as a trivial complaint. He must realize that the sooner a case receives treatment, the greater the prospect of a satisfactory result.

A Case of Degeneration of the Intervertebral Disc Following Lumbar Puncture

By P. G. Epps, M.B.

THIS case is very similar to those described at the last meeting by Mr. Everett (see Sect. Orthop., p. 208 this issue). The patient is a soldier, aged 27 years, who in May 1941 developed meningitis. During the course of treatment he had five lumbar punctures, the last of which was about July 25; this one took thirty-five minutes, and the patient describes pains shooting down each leg as repeated attempts were made to pierce the theca. At the beginning of August he was discharged, and went on leave; he had no pain at all then, but after fourteen days he developed, quite suddenly, a severe lower back pain, which he said caused him to collapse in about three days, and he was taken to hospital.

X-rays taken then, on August 25, showed no abnormality of the spine. The severity

of his pain was such that it was decided to immobilize him on a plaster bed. The pain grew worse, however, and at the end of September he suffered severe attacks coming on in spasms, lasting about ten minutes, of such acuteness that his pulse became feeble and his complexion paled. During the worst of these attacks, his abdominal muscles were rigidly in spasm.

X-rays taken on October 10 showed collapse of the intervertebral disc between the 4th and 5th lumbar vertebræ with absorption of the adjacent portions of the vertebral bodies.

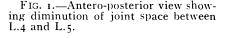


FIG. 2.—Lateral view showing (a) diminution of joint space; (b) hernia-

tion of disc substance into the vertebral body of L.4; and (c) a large osteophyte growing from the margin of the body of L.4.

Since the end of September his condition has steadily improved. During his stay in hospital he has been afebrile, his blood sedimentation rate is 8 mm. in one hour, and his blood-count normal. The process appears to be aseptic degeneration.

I am grateful to Mr. Stamm and to Dr. Campbell, the Medical Superintendent of the hospital, for permission to publish this case.

The Technique of Arthroplasty

By T. T. STAMM, F.R.C.S.

It is not the purpose of this paper to suggest any new method in the technique of arthroplasty, but to emphasize what the older surgeons clearly realized, namely, that the essential structures of the new joint-articular surfaces, synovial membrane, &c.-are formed, not at the time of the operation, but during the subsequent period of treatment. Arthroplasty is not an operation, it is a mode of treatment, the first stage of which consists in an operation for arthrolysis.

Most surgeons have had the opportunity of exploring a false joint which has formed

