SPINAL ANAESTHESIA

By Miss G. R. Porter

One of the newest procedures we have introduced into our Hospital is the giving of spinal instead of general anaesthetic in such cases as involve areas below the umbilicus. Up to January 1929 twenty-five such operations had been performed. These include amputations of legs, stone in the bladder, osteomyelitis and other bone operations on the lower limbs, pus tube, plastic operation on the bladder, etc. In some cases a small amount of local anaesthetic was used in combination with the spinal—as, for instance in the case of the operation for pus tube.

The benefits of this anaesthetic may be summarized as follows:—

1. Avoidance of shock.
2. Less danger of lung, heart or other complications. Specially good in cold weather when it is difficult to heat the operation room.
3. Seldom any nausea. Fluids may even be given during the operation if the patient is thirsty. Food can be given as soon as the patient returns to the ward.

The disadvantages are apparently negligible. There is a disease in Blood Pressure, but this can be counteracted by a stimulant. The procedure is as follows:—

1. Patient sits up with his head bent forward.
2. With the crest of the ilium as a landmark an area is prepared with Tr. Iodine.
3. A small amount of novocaine (1 per cent solution) is injected below the skin to give a local anaesthetic.
4. A spinal puncture is made and fluid drawn off first into the already opened neo-caine tube making a solution neo-caine (dry) and spinal fluid.
5. More spinal fluid is withdrawn into a sterile test tube. This amount varies according to the pressure of the fluid.
6. An ampule of Ephedrine is given sub-cutaneously.
7. The solution of neo-caine is slowly returned to the spinal canal.
8. The patient lies down—the area of the puncture being protected by a sterile towel.

Anaesthesia is produced in 5–15 minutes and lasts approximately 1 hour. Of the 25 cases so treated the anaesthetic effect was slow in the case of a leper, the Doctor having to wait 15–20 minutes before being able to proceed with amputation of the leg. In one case it failed altogether, that is, there was apparently no anaesthesia produced. Two patients were nauseated but most of the rest took water or glucose solution during the operation. In no case was there any bad effect. As with an ordinary spinal puncture the patient should not raise his head for 12–24 hours. The neo-caine is prepared in special tubes for spinal use by a French laboratory. The dose varies according to the weight of the patient. It is on the whole not expensive 12 tubes being obtained for Rs. 4–8.