ANAESTHESIA* IN RECTAL SURGERY

By

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Twenty years ago the anaesthetics given at this hospital were with few exceptions of two sorts. For all the small cases such as haemorrhoids, fissures and fistulae a short deep anaesthetic was given. This was administered by means of a Clover's inhaler. For carcinoma of the rectum the routine treatment was a preliminary colostomy, followed two or three weeks later by a perineal excision. Open ether was given for the colostomy and for the perineal excision a spinal anaesthetic was used. The spinal solution used in those days was stovaine prepared according to Chaput's formula and consisted of 10 per cent stovaine, 10 per cent sodium chloride and 1 c.c. of distilled water. This solution could be relied on to produce anaesthesia for about one hour after which its effects started to wear off. If the operation was not completed by this time a light general anaesthetic was given for the remaining period. Caudal block was occasionally used for some of the small cases but its effects were very variable. Sometimes it was slow in working and at other times it only produced a slight analgesia. The patients did not take kindly to it.

With the arrival of low spinal anaesthesia general anaesthesia was largely abandoned for the small cases. An injection of 0.4 c.c. of the stovaine solution was injected with the patient in the sitting position and after remaining seated for a minute or two he was placed on his back and wheeled into the theatre. For several years this proved to be a very satisfactory procedure. With the appearance of nupercaine on the market stovaine was gradually abandoned and at the present time up to 0.8 c.c. of the heavy nupercaine solution is used for all the cases requiring low spinal anaesthesia. Its action lasts for a minimum of two or three hours and thus it prolongs the time after operation when the patient may need the injection of an opiate. Of recent years local anaesthesia has been employed for numerous cases of fissure and haemorrhoids. The local anaesthetic solution is usually injected into the area by the surgeon himself and sometimes, as in the case of nervous patients, pentothal

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is given by the anaesthetist both as a soporific and to supplement the anaesthesia provided by the local injection.

Most of the malignant growths of the rectum are now removed by perineo-abdominal excision or by a combined excision with one surgeon working on the abdomen while the other works at the perineum. Perineal excision has now been largely abandoned and is only performed on a few selected cases as, for example, when the patient is particularly old and feeble and the growth is an early one. The type of anaesthesia varies with the surgeon. With some the whole operation is performed under spinal anaesthesia and the patient is given an injection of omnopon gr. 1/3 and scopalamine gr. 1/150 as premedication with possibly some nembutal by mouth as well. These patients usually reach the theatre asleep or if not asleep with sufficient drowsiness to produce amnesia. Heavy nupercaine is again used for the spinal injection and 1.5 c.c. or 1.6 c.c. is usually an adequate dose. For another surgeon the dose of nupercaine is reduced to 0.9 c.c. or 1 c.c. This is sufficient to block the sensory nerves to the pelvis and perineum. General anaesthesia is then induced with a small injection of pentothal and the patient is kept lightly anaesthetised with nitrous oxide with or without the addition of a small amount of ether. The blood pressure is kept at a safe level by means of some pressor drug such as ephedrine or methedrine. It is better to give small doses (e.g. ephedrine gr. 1/4) which can be repeated, than one large dose of the drug which may produce excessive oozing of the operation area and thus embarrass the surgeon. Recently Dr. Frankis Evans has introduced a method of maintaining the blood pressure by a continuous intravenous drip of a dilute solution of adrenalin. By this means the blood pressure can be kept at a more or less constant level as the rate of drip can be increased whenever occasion demands it. Many of the patients undergoing operation for carcinoma of the rectum are given a drip transfusion of saline or blood while on the operating table. This also helps to combat the fall in blood pressure caused by the spinal anaesthetic and to reduce shock.