baby was born in the chamber vessel. The placenta was expressed with some difficulty fifteen minutes afterwards, but came away quite intact. I had a good deal of trouble in stopping the haemorrhage after the placenta came away, for I could easily get hold of the uterus and make it contract, but it seemed to have very little retracting power, and filled with blood as soon as it was left. A hot continuous intrauterine douche was administered, ergot and strychnine given hypodermically, and the uterus held firmly for nearly one and a half hours before it was safe to leave it. From then onwards, however, there was no further haemorrhage of any note. Two pints of saline solution were given intravenously and pills of ergotin, quinine, and strychnine prescribed. The case ran a nearly normal course except for a slight rise of temperature to 100° during the first two days, probably reactionary and due to the extremely anaemic condition of the patient. The pulse, which immediately after the confinement was hardly perceptible at the wrist, was at 10 o'clock that night 110 and fairly full and strong.

fairly full and strong.

The stillborn fetus, a female of the eighth month in development, weighed 5½ lb., and appeared quite normal and healthy. It had probably died the day before delivery, after the convulsive movements the mother had mentioned. The placenta was quite normal in every respect, but from the dark blood clots still adherent to it it appeared to have been separated from its uterine attachment over half of its surface; otherwise it

presented no unusual features.

The points of interest in this case appear to me to be: First, the spontaneous emptying of the uterus without any previous signs of labour-an event which probably saved the patient's life. The loss of blood had in all likelihood so far reduced the general blood pressure, that what was left of the contracting power of the uterus was able to prevent further dilatation and to stop the haemorrhage, which had probably become feeble in utero, this action no doubt being stimulated by the pituitary extract. Why the labour should end so precipitately I can offer no opinion, unless it was again due to the action of the pituitary extract. The second feature of interest was the fact that I was able to get the uterus to contract and finally to retract so as to stop the haemorrhage. It is usually considered that in cases of concealed accidental haemorrhage the uterine muscle is so diseased as to have lost the power of contracting and retracting. The practically uninterrupted recovery of a patient who was so near to death must be rare. As to the predisposing cause of the haemorrhage, was the uterine muscle attenuated as a result of the attack of diphtheria, or was the nervous mechanism poisoned and stimulus interrupted by that malady? And, if so, why was the uterus able to contract sufficiently to expel the fetus and to remain contracted later? I may add that the urine was quite normal in quantity, acid reaction, specific gravity 1020, and at no time contained any abnormal constituents.

TECHNIQUE OF ANALGESIA IN INTRANASAL SURGERY.

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RECENT discoveries have so modified the indications for general anaesthesia in intranasal surgery that, granted ordinary self-control by the patient and delicate handling by the surgeon, the discomforts and dangers of efficient analgesia are considered less than those of general anaesthesia. The only intranasal operation really unsuitable for local analgesia is the frontal sinus obliteration.

I have found the technique about to be described highly satisfactory in operations upon the turbinal bones and nasal septum; indeed, a patient who has slept through the greater part of the operation may be able, with a little assistance, to walk back to bed. The employment of chloroform (without admixture with ether), injections of cocaine and adrenalin, alone or in combination, and post operative packing with adrenalin are absolutely unjustifiable in operations on the nose, and will sooner or later lead to catastrophe. Moreover, with or without the use of a general anaesthetic, the injections of cocaine and adrenalin lead to marked excitability, difficulty of breathing in the recumbent posture, and excruciating headache (through adrenalin vasomotor stimulation), with the need of constant administration of hot coffee and aromatic spirits of ammonia. The confidence of the lat ent is lost and the operation is rendered more difficult.

One hour before the commencement of the operation a

hypodermic injection of $\frac{1}{4}$ grain of morphine with $_{\bf 1} \hat{t}_{0}$ grain of atropine sulphate should be given and the nasal passages packed with gauze soaked in equal parts of 10 per cent. cocaine and adrenalin. This should be done with reflected light, so that narrow strips can in most cases be passed behind a marked deviation. The patient should be allowed to remain as quiet as possible for thirty minutes, when he is transferred to the operating table and the gauze strips are removed, a small portion of cotton wool being inserted far back in each nostril to soak up any overflow from the following infiltration of urea hydrochloride quinine solution. In the case of an operation upon the nasal solution. In the case of an operation upon the masar septum three points for injection will suffice on each side; these points are at the angles of a triangle with the base corresponding to the junction of mucosa and skin just behind the anterior nares and the apex over the vomer, its exact position being dependent upon the area infiltrated by the two injections in front. If the inferior turbinals are to be removed two injections will suffice on each side, one just behind the anterior extremity and the other at the junction of the middle and posterior thirds. The syringe employed should be all metal and the needle of the finest aperture procurable with bevelled tip without point. Dental needles are most con-The solution employed should be 1 per cent. quinine-urea-hydrochloride, and the amount injected should not be stinted. The nose is again packed with gauze wrung out of the cocaine-adrenalin solution, and in about twenty-five minutes the operation is commenced.

The haemostasis is perfect, and the analgesia is so thorough as to be truly anaesthesia, even the tactile sensibility being in most cases destroyed. There is but little emotional distress, and I have known patients, on being told to close the eyes and sleep, who have done so, and snored away during the entire operation, the only disability being that the head has had to be steadied by an assistant. The analgesia persists as a rule for about eight to twelve hours. I have not met any instance in which it has lasted several days, as claimed by other observers. There is no after-sickness, and the patient is free to go about his business in about twenty-four hours. In consequence of the exudation caused by the quinine-urea solution, there is some after-swelling, but this seems to minimize the possi-

bilities of post-operative eozing.

It is quite possible to drain and explore the antrum of Highmore by this method, as is the routine practice of many American surgeons, but time is required before the advantages of efficient analgesia are fully appreciated in this country. It is safe to predict that the future will see further rapid progress as new chemical discoveries of nontoxic anaesthetics are announced.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

A CASE OF CEREBRO-SPINAL MENINGITIS C. W., aged 23, a driver A.S.C., was removed on April 9th to the Red Cross Hospital, Trent Vale, and from there, on April 10th, to the Bucknall Isolation Hospital. At the onset there was nausea, with violent headache and retraction of the head, and the temperature rose to 103°F. When admitted into the isolation hospital he was quite unconscious, with the head greatly retracted and the back curved; there was slight squint, increased reflexes, Kernig's sign, on the left buttock a patch of spots, and on the lips a well-marked patch of herpes. The pupils were inactive and contracted, tache cérébrale very marked; the urine was passed freely, and contained no albumin. During the second day incontinence of urine and faeces set in, and continued during the illness. Lumbar puncture was performed on April 10th with Barker's needle. Lumbar fluid was sent to the Health Laboratory, Manchester, for examination, and was said to contain Meningococcus intracellularis. The jaws were so elenched that it was impossible to obtain a swab from the throat. Soamin was given intramuscularly in 6-gram doses daily, until 100 grams had been given. Lumbar puncture was made every four days (six times altogether); 30 to 60 c.cm. of fluid was removed each time, and 15 c.cm. of antimeningococcus given after the withdrawal of fluid on each occasion until 75 c.cm. had been given. The puncture was made each time that