

## **ANAESTHESIA FOR DOMICILIARY OBSTETRICS**

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If an abnormality requiring interference develops in labour, many factors will influence the doctor in deciding whether transfer to hospital is desirable. Amongst these is the need for an anaesthetic. Local anaesthesia is well suited to domiciliary practice, but, ideally, a general anaesthetic is best administered in hospital. The reason for this is that the patient may vomit, and inhale vomitus into the bronchi. Should this occur a maternal death could result, which might have been avoided had full hospital facilities been available.

### **General Anaesthesia**

In rural practice, where specialized help may be over one hour away, situations are more likely to arise where general anaesthesia must be induced in the home in order to carry out a manoeuvre necessary to save the life of mother or baby. This necessitates the presence of two doctors, and the anaesthetic given should be the one with which the administrator is most familiar. Should this be chloroform, then a strong positive indication exists for its use. If ether is chosen, its inflammability must be remembered, and appropriate action taken. Any anaesthetic must be preceded by the intravenous injection of atropine gr. 1/100, and 2 to 3 minutes allowed for it to take effect. At the end of this procedure the patient is placed on her side and not left unattended until she is fully conscious. Should she vomit, the foot of the bed is raised a few inches, and the airway cleared.

Postpartum haemorrhage with retained placenta is one of the commonest reasons for calling the flying squad. In most areas of the British Isles, the squad, complete with specialist anaesthetist, is able to be on the spot in a few minutes, and the general practitioner's job is to control the bleeding with intravenous ergometrine, and if possible to put up a plasma infusion. In outlying districts, particularly in the winter, the squad may be much less readily available. If, when the patient has been resuscitated with the blood pressure

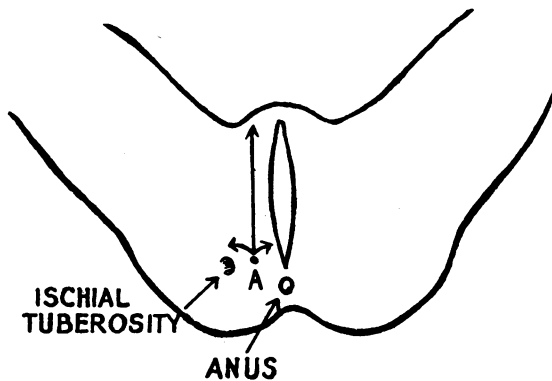
constant at a normal reading for 15 minutes, the flying squad is still unlikely to arrive in less than half an hour, it is justifiable to give a general anaesthetic and manually remove the placenta, for should such a case deteriorate again, subsequent resuscitation may be difficult. If manual removal is attempted less than an hour after the intravenous injection of ergometrine, the operator frequently experiences difficulty in getting his hand into the uterine cavity, unless the anaesthetic relaxes the uterine musculature. Both chloroform, and deep ether do this, but trilene does not.

### Local Anaesthesia

In contrast, local anaesthesia is eminently suited to domiciliary obstetrics. Lignocaine hydrochloride 1 per cent is usually recommended, but in practice 0.5 per cent works very well, and has the advantage that the maximum total dosage advised (500 mg. lignocaine) is contained in 100 instead of 50 ml.

Pudendal block provides analgesia suitable for a low forceps delivery, or the application of forceps to the aftercoming head in breech delivery. It is unwise to attempt manual rotation of the head, for except with a co-operative patient, and an easy rotation, analgesia is usually inadequate.

The technique is easy, and the whole beauty lies in the fact that it is not at all a precise procedure. The equipment required is a 20 ml. syringe, a stout 4 inch needle, and a smaller needle, such as would be used for normal local anaesthetic injection.



(1) Start at point A mid-way between the anus and ischial tuberosity, and with the smaller needle infiltrate the line of a medio-lateral episiotomy.

(2) With the 4 inch needle infiltrate the labia as far forward as

lateral to the clitoris, again starting from point A, and using about 10 ml.

(3) Without withdrawing the needle, feel vaginally for the ischial spine, and advance the needle until the point is adjacent to it. Inject 5-10 ml. slowly withdrawing the needle all the time.

(4) Without withdrawing the needle from the skin, advance the point laterally until it is close to the ischial tuberosity; inject a further 5 ml. withdrawing slowly.

(5) Repeat the procedure on the opposite side.

A total of about 70 ml. of 0.5 per cent lignocaine (350 mg.) is used—well below the maximum recommended dosage. The large volume of the solution allows widespread dispersion of the local anaesthetic and the action can be potentiated, if necessary, by the inhalation of gas and air, or trilene.

Recently a number of techniques have been evolved in which a phenothiazine, in combination with pethidine or pethilorfan, have administered intravenously some 10 minutes before delivery. Using these drugs it is claimed that local infiltration of the perineum is all that is required, for a low forceps delivery.

It must be remembered that the majority of forceps deliveries are in primigravidæ, for which an episiotomy is usually required and, therefore, fairly extensive infiltration of local anaesthesia is, in any case, going to be needed. In fact it takes very little more time to complete a formal pudendal block which, in average hands, appears to the author to give more uniformly satisfactory analgesia, without any risk of depressing the infant's respiratory centre.

### Conclusion

A plea is made for the avoidance of general anaesthesia in the home except in grave emergency. It is suggested that pudendal block is the anaesthetic of choice for domiciliary practice and that the general-practitioner obstetrician confines obstetric interference in the home to low forceps delivery.

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