

INTRAVENOUS ANALGESIA IN EVACUATION OF UTERUS AND MANUAL REMOVAL OF PLACENTA

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Anaesthesia in emergency cases of abortion and retained placenta is a great problem. The patients are not prepared for anaesthesia and on many occasions the stomach is not empty either due to recent ingestion of food and/or delayed emptying of stomach during labour. General anaesthesia has got a great risk of maternal asphyxia from aspiration of stomach contents in these patients. In this condition Mendelson (1946) has described two types of cases; the obstructive type, caused by the entry of solid food particles into the bronchial tree, and the "asthmatic" type, caused by the inhalation of acid stomach contents.

The published "Report on Confidential Enquiries into Maternal Deaths in England and Wales 1955-1957 (Ministry of Health, 1960)" shows that, of the deaths due to complications of anaesthesia, inhalation of vomited or regurgitated stomach contents occurred in 18 of the 31 cases reported and in 17 it was the major cause of death. The exact figures of asphyxial death from general an-

aesthesia in these cases are hard to get and must be higher than is revealed in the report. Cases of abortion and retained placenta are dealt with by house surgeons in most obstetric units without the help of skilled anaesthetists. In many places the doctor has to deal with these cases single-handed and many of these doctors have got no training in anaesthesia.

Aspiration asphyxia of general anaesthesia may be avoided by one of the following methods but none of them are perfect:— (a) use of emetics, e.g. apomorphine by injection — not too successful (b) washing of stomach — painful and messy process, (c) use of the cuffed endotracheal tube during anaesthesia — requires experienced anaesthetist. Over and above this, even in the hands of experienced anaesthetist, in spite of all precautions, there do occur some maternal deaths due to aspiration asphyxia. So, with a view to do evacuation of the uterus and manual removal of the placenta safely without giving pain to the mother or increasing risks to her we started intravenous medication for these operations.

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Drugs and Method Used

For evacuation of the uterus and manual removal of the placenta we used intravenous pethidine and Lethidrone (N-Ally-1-Normorphine Hydrobromide). Intravenous pethidine may cause respiratory depression and slow breathing by depressing the respiratory centre, and hypotension and circulatory depression due to myocardial depression. Lethidrone was therefore used to counteract the draw-backs of pethidine, mainly respiratory depression. Lethidrone is a tricky drug to use. Too little will not reverse pethidine effects; too much will potentiate them and analgesic effect will be counteracted too. The proportion used in our series was 1:75.

After the decision is made as to the operation, 2 mgm. of Lethidrone and 150 mgm. of Pethidine, are drawn in the same syringe. The operator injects the drug intravenously slowly, taking about two minutes to complete the injection. He then goes to scrub up and put on mask, gloves and gown. By this time the patient falls asleep but can be awakened easily to co-operate. Sometimes we wait for 15-20 minutes from the time of injection for full effect of the drugs. The patient is put in the lithotomy position and the operation is performed with gentle care in the usual way. Pulse, blood pressure and respiration are recorded before the injection, 10 minutes after the injection and after the operation is completed.

Siquil 20 mgm. is injected intramuscularly in highly apprehensive patients about 30-45 minutes before

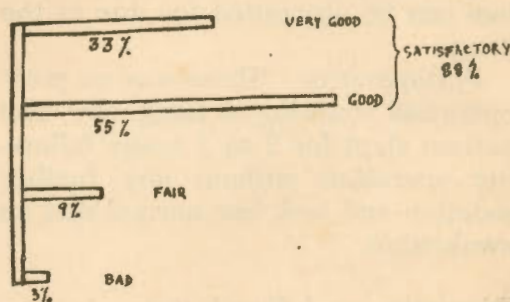
the operation.

Results

Uptil the writing of this paper 153 cases of evacuation of the uterus and 52 cases of manual removal of the placenta have been performed with this intravenous medication. Majority of the abortions were recent ones but some were old ones with retained products of conception which needed thorough curettage.

Success Rate

The success rate has been judged by the pain sensation felt by the patient. The success rate is satisfactory in 88% of cases and fairly so in a further 9%. It failed in 3% of cases and general anaesthesia had to be used to complete the operation. The failure occurred only in cases with long standing retained products of conception where there was need for thorough dilatation and curettage and the patients were apprehensive.



Very good — No feeling of pain or discomfort.

Good — Little discomfort but no pain.

Fair — Slight pain.

Bad — No relief of pain and general anaesthesia had to be used.

Effect on Patient

General Condition. There was no deterioration of general condition and no development of shock in any of these cases.

Blood Pressure. Blood pressure dropped in 9% of cases, the maximum systolic drop being 20 mm. Hg and diastolic drop being 14 mm. Hg.

Blood pressure was raised in 10% of cases, the maximum systolic rise being 24 mm. Hg. and diastolic rise being 20 mm. Hg. It is difficult to account for this rise of blood pressure which may be due to the effect of Lethidrone.

Pulse. No significant change. The pulse rate increased by 10-25 per minute in 7% of cases.

Respiration. Respiratory rate was decreased by 5-10 per minute, the minimum rate being 12 in 3 cases. Average respiratory rate was 14 per minute. No case needed oxygen. There was no cyanosis.

Blood Loss. No increase of blood loss can be accounted for due to the drugs.

Postoperative. There was no post-operative vomiting or hang over. The patient slept for 2 to 3 hours following operation without any further sedation and took her normal diet on awakening.

Discussion and Conclusion

The hazards of general anaesthesia in dealing with emergency cases of abortion and retained placenta are well known. In spite of the use of the improved techniques by skilled anaesthetists some patients meet their death from anaesthesia in these cases, particularly due to aspiration as-

phyxia. The loss is much higher in the hands of the "occasional anaesthetists" who has to deal with these cases in the majority of the hospitals and health centres and outside the hospital, particularly so when the doctor has to manage some of these cases single-handed. The intravenous pethidine and Lethidrone analgesia has been well tried in our hospital in 153 cases of evacuation of the uterus and 52 cases of manual removal of placenta. The advantages claimed are the followings:—

(1) It is highly successful — no failure in recent abortion and retained placenta cases.

(2) It is very safe — no shock or increased blood loss or aspiration asphyxia.

(3) There is no struggling or discomfort or vomiting during induction or in post-operative period—certainly better and less troublesome than ether anaesthesia which is used commonly by "occasional anaesthetists" in these cases.

(4) These operations under this analgesia can be performed single-handed even by junior doctors, who do not have special knowledge of anaesthesia.

(5) The operation can be performed in the presence of fire in the room in cold countries as there is no question of inflammable anaesthetic.

(6) These patients can be managed at home by local obstetricians or by mobile obstetric team, saving hospital beds and lessening the chance of haemorrhage or shock during removal of these patients to the hospital.

(7) It is less costly.

The advantages, safety and success rate of Pethidine-Lethidrone combi-

nation analgesia in emergency cases of abortion and retained placenta prove that it is the method of choice, certainly in ordinary hospitals and domiciliary practice and possibly in well-equipped hospitals too.

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