PENTAZOCINE AND DIAZEPAM ANALGESIA FOR MINOR GYNAECOLOGICAL OPERATIONS

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SUMMARY

A mixture of pentazocine 90 mg and diazepam 30 mg was used for 196 minor gynaecological procedures. Satisfactory operating conditions were achieved in 98% of the patients. No severe adverse reactions or side effects were recorded.

There are a number of methods for inducing analgesia which can be used for minor gynaecological procedures. These differ considerably in efficacy and possible side effects. We have administered pentazocine mixed with diazepam as a hypnotic and analgesic, in 196 patients with relative safety even in potentially hazardous conditions, such as patients with arteriosclerotic heart disease or a full stomach.

Pentazocine is a potent, well tolerated, synthetic analgesic. Pentazocine 30 mg has an analgesic effect equal to 75–100 mg pethidine. The effect is rapid in onset after intravenous injection and the drug is well tolerated both systemically and locally even by very ill or elderly patients. Pentazocine may be mixed with many other drugs including sedatives, hypnotics and tranquillizers. In hospital obstetric practice and in domiciliary practice, the incidence of nausea and vomiting after pentazocine was found to be less than that produced by pethidine (Moore, Carson and Hunter, 1970; Mowat and Garrey, 1970).

Diazepam is a tranquillizer and sedative which can be used for premedication and a variety of therapeutic procedures (Dundee and Haslett, 1970). Recently, diazepam and pethidine have been recommended for minor gynaecological surgery (Goldman, Ovadia and Eckerling, 1972).

MATERIALS AND METHODS

The patients were 196 women (age range 16–76 years) who underwent minor gynaecological operations which included diagnostic curettage, therapeutic abortion, biopsy and coning of the cervix and exploration of the uterine cavity. Fifty patients were poor-risk cases because of severe cardiac disease, hypertension, diabetes or bronchial asthma. The patients fasted overnight unless the operations were of an emergency nature.

The mixture was prepared by adding pentazocine 90 mg and diazepam 30 mg to a bottle containing 500 ml of glucose 5% in water. This was infused intravenously at a rate of 50 ml/min until the patient appeared to be asleep but still reacted to painful stimuli. The infusion was then stopped and the patient prepared for the procedure. Then 50–75 ml of the mixture was infused rapidly to achieve the desired state of analgesia.

All patients received atropine as a premedicant 5 min before infusion of the mixture. Pulse, arterial pressure and respiratory rate were recorded before and during the operation. The total blood loss, the duration of procedure and the time for recovery were noted. Analgesia and sedation were classified as "excellent", "good", "fair" or "poor" in accordance with the patient's reaction during and after the procedure. In making this subjective assessment the gynaecologist took account of analgesia, sedation, movement, patient co-operation and side effects.

RESULTS AND DISCUSSION

Between 100–150 ml of the mixture were required to achieve satisfactory analgesia. During the infusion the arterial systolic pressure decreased by as much as 10% of the preoperative value in 14 subjects, returning to normal soon after commencing the procedure. The respiratory rate decreased slightly in all cases. Postoperative nausea occurred in 6 cases.

The assessments of the method are shown in table I. Excellent or good conditions were achieved in 98% of the patients without any notable side effects, even in poor-risk patients. No instance of bronchospasm or extra-pyramidal signs was observed. Amnesia was produced in all patients.
Table I. The degree of analgesia achieved in minor gynaecological procedures following the intravenous route of pentazocine and diazepam. Premedication was given by 6.5 mg atropine i.m. All procedures were compiled under this form of analgesia.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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<tr>
<td>Patient</td>
<td>149 (76%)</td>
<td>40 (20.4%)</td>
<td>3 (1.6%)</td>
<td>4 (2%)</td>
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without any alteration in mood (nervousness, floating feeling, etc.).

An advantage of this method, compared with a mixture of diazepam and pethidine is that in many countries the use of pentazocine is not limited by narcotic legislation.

**REFERENCES**


**BOOK REVIEW**


The title of this book gives a clear indication of its contents and for whom it is written. As the author, who is a practising anaesthetist, states in the introduction, the concept of this book is complementary rather than competitive to current works on this subject.

The preliminary chapters consider general aspects of hypnosis including its limitations. There then follow practical accounts of the methods used by the author and others, of inducing hypnosis and deepening techniques, which are clearly and fully described. The most important chapters concern the clinical uses of hypnosis in anaesthesia, in children, in dental surgery and its value as an anaesthetic research tool. The two chapters on Sophrology by Professor Caycedo serve as an introduction to a new approach to the study of consciousness, and to those unfamiliar with the terminology are difficult to follow and seem misplaced in such an otherwise essentially practical approach to hypnosis. The appendices contain useful information for those who are practising hypnosis. Each chapter ends with a list of references.

There is no doubt that this book serves as an excellent reminder that hypnosis has a part to play in the practice of all doctors especially anaesthetists, but is too often ignored for a variety of reasons. Lack of adequate time, pressure of other commitments and the certainty of modern anaesthetic agents undoubtedly contribute to the disinterest shown. When reading the book one cannot help being struck by the benefits that have accrued in the situations in which hypnosis has been used, and yet in direct contrast by the paucity of publications and numerically few cases reported to substantiate these claims. Because of the difficulties in investigating scientifically the phenomenon, medical science has tended to forget and overlook research into hypnosis and has turned to more quantifiable and rational projects that may well be of less direct benefit to the patient.

This most readable volume, at a very reasonable price and well produced, will stimulate interest in hypnosis and is thoroughly recommended to all those who wish to acquaint themselves with more practical details of its many applications in clinical situations.

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