with the tissue-buffering mechanism for storage of catechol amines. Under these circumstances it is also likely that the tissue monoamine system is more sensitive to the action of ephedrine and amphetamine.

It is clear that tranlycypromine should never be given either in the form of "parstelin" (tranlycypromine and trifluoperazine) or of "parnate" (tranlycypromine) within one to two weeks of giving ephedrine or amphetamine as well. In view of the pharmacological action of the drug on so many systems it should probably not be given with anything else at all, at any rate in the present state of our knowledge.

The side-effects of tranlycypromine are due to amine-oxidase inhibition, but there is comparatively little to suggest that this is true of its antidepressant action. One hopes that it will be possible to separate these effects, since the practical difficulty of ensuring that a patient will not consume other tablets as well as tranlycypromine makes the drug a liability in practice. Although all these effects have been known since 1960 they are often still unrecognized.—I am, etc.,

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Side-effects of Tranlycypromine

SIR,—In view of the recent reports of serious side-effects associated with tranlycypromine ("parnate") therapy, including the fatality reported in your columns by Dr. A. M. Womack (August 10, p. 366), we have thought it worth communicating our experience with this drug in the course of a two-year controlled comparative out-patient trial of four antidepressants: tranlycypromine, imipramine, amitriptyline, and isocarboxazid. A full account of this work is to be published elsewhere shortly.

There were 38 patient trials of parnate. The dose prescribed was 10 mg. twice daily for five days, then 20 mg. twice daily. 15 patients (39%) experienced severe side-effects; of these, 12 (32%) as a result stopped the drug or were advised to do so. Nine patients (24%) experienced headache, seven the characteristic sudden, severe, incapacitating type, and two others milder headaches. Three of those with headache were able to continue the drug without further trouble and without reduction in the dose of 20 mg. twice daily, four refused to continue, and two had further headaches in spite of

reduced dosage so the drug was discontinued. Of interest was the unexpected development of the headache in some patients who had been taking 40 mg. daily for long periods (three, eight, and twelve weeks) without trouble. In five other patients other symptoms (palpitations, chest tightness, giddiness, visual disturbance, nausea, drowsiness or hesitancy of micturition) occurred with smaller doses, 20 to 30 mg. daily, within a week or two of starting medication. In these cases also the patients either stopped taking the drug or were advised to do so. One patient, after taking a number of tablets irregularly over the course of a month, developed a hypoplastic anaemia. This may not have been attributable to the drug, since the patient gave a history of a previous episode of obscure anaemia.

We found the drug an effective antidepressant in the dosage we used, but not more so than isocarboxazid, which was comparatively free from side-effects. On the basis of our experience during this trial, together with the reports that have appeared of more serious sequelae to the use of tranlycypromine, we have grave doubts about the advisability of further administration of this substance, unless some explanation can be found which would enable preventive measures to be taken.—We are, etc.,

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Foetal Death after Pethidine and Promazine

SIR,—Having used the combination of pethidine and promazine as sedation in labour for the past five years I was disturbed at the report by Mr. A. G. Amias and Mr. D. Fairbairn of foetal death following its use (August 17, p. 432). I trust that the report will not discourage administration of the combination which has been proved effective.^{1 2}

It does, however, emphasize that care must be taken in the amount of drugs administered, especially intravenously. Pethidine 100 mg. given intravenously in a single injection is certainly not without hazard and any effect is bound to be potentiated when promazine is given simultaneously. One may doubt the need of any premedication prior to surgical induction of labour, but the intravenous use of such high doses as pethidine 100 mg. and promazine 50 mg. would seem unwarranted, since it has obviously no advantage over a suitable intramuscular injection given about an hour previously.

In what must be now over 1,000 cases I personally have seen no serious effect from the giving of pethidine and promazine (50 mg. of each) intravenously in a single injection. I have seen a case similar to the one described where in error a patient was infused with 100 mg. of pethidine and 100 mg. of sparine in 500 ml. of 10% glucose within 15 minutes.

The patient, who was established in labour, looked almost moribund with a thready rapid pulse, hypotension, and reduction in respiratory rate. The foetal heart rate rose to 180/min. It was decided to do nothing till the effect of the drug had worn off, and the patient delivered herself spontaneously eight hours later of an active healthy baby. At no time was there evidence of meconium staining of the liquor amnii.

It is always easy in retrospect to criticize the treatment of a case, but in that described by Mr. Amias and Mr. Fairbairn it might have been better not to have carried out caesarean section but to have waited till the effect of the drugs had subsided, as reported above. The actual operation within an hour of the initial injection may have played a part in the asphyxial death of the baby. Pre-eclampsia associated with post-maturity may also have contributed to intrauterine asphyxia.

With regard to routine sedation in labour the intramuscular administration of pethidine (maximum 100 mg.) and promazine (maximum 50 mg.) by single injection is safe in the hands of both midwife or medical attendant, whereas the intravenous administration of drugs during labour should be under experienced obstetrical supervision. As a general rule pethidine 50 mg. and promazine 50 mg. in a single intravenous injection would seem to be the maximum which should be given, and we have not found higher dosage necessary.

Where there is experienced obstetrical supervision I should like to advocate the extension of intravenous sedation in labour. It not only cuts down the total amount of analgesia required but it gives immediate relief to the patient and not 15 minutes or five pains later as with intramuscular injections. The psychological effect in the patient is obvious.—I am, etc.,

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Increased Libido with Chlorprothixene

SIR,—There have been occasional reports^{1 2} in the literature of chlorprothixene ("taractan") having an excitatory, rather than a tranquillizing, effect on patients. Ma and Crandell¹ have also reported that a patient developed increased libido following the administration of the drug.

I wish to draw to your attention a similar effect upon a 37-year-old married woman suffering from manic depressive psychosis. This patient from the age of 17 years has had numerous attacks of depression and mania. Over the past two years the attacks have been circular, two weeks of depression alternating with two weeks of mania.

In June, 1962, chlorprothixene 50 mg. t.d.s. was prescribed to be taken during the manic phase. A few days after taking the

drug she noted a marked increase in libido, which she could only relieve by masturbation. She stopped taking the tablets and the effect dwindled within a day or two, but the whole episode led to a great deal of guilt and self-reproach in subsequent depressive phases (the patient being a devout Roman Catholic). At the time, however, it was considered that this might have been a purely manic symptom and not due to chlorprothixene. Her "manic" phases were later partially controlled with prothipendyl hydrochloride ("tolnat") 40 mg. t.d.s. In July, 1963, chlorprothixene 30 mg. t.d.s. was again prescribed and within a few days she noticed increased libido and she again resorted to masturbation. The effect dwindled rapidly once she stopped taking the drug, even though her manic phase continued for another week, hence one must conclude that it was an effect of the drug.

—I am, etc.,

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Dental Anaesthetics

SIR,—Dr. W. G. Dawson is the sixth on record as providing tracheal intubation anaesthesia for ambulant patients in the dental surgery (August 31, p. 565). I applaud his adherence to the first principles of safe anaesthesia while disagreeing with him about policy and position. The sitting position has proved safe in thousands of cases, who benefit from reduction of blood loss. It is more physiological in cases of heart failure, emphysema, or obesity. Intubation soon becomes easier than in the supine patient.

The *laissez faire* policy he recommends has already failed to bring about general improvement in dental anaesthesia, progress in which has lagged far behind hospital practice.¹ I wrote, without contradiction, in the *British Dental Journal*²: "It is unfortunate that . . . dentists should appear to be largely uninterested in advances in dental anaesthesia which they themselves cannot administer."

When anaesthetic mishaps occur it is convenient to blame the machine, but the man is more important. Free choice of anaesthetist does not really exist for dentists, basically because of Ministry policy still based on the conditions of 1948, reflected in the regulations for anaesthetic fees. The best interests of the patient and the community are not being well served by restricting dental anaesthesia to non-specialist methods. Future anaesthetic mishaps will be followed by the question—could they have been prevented by intubation? The probable answer will be yes.

Progress in dental anaesthesia depends on closer co-operation between dentists and specialist anaesthetists. To promote this I recommend that:

1. The Ministry should regard dental surgery work by specialist anaesthetists

as nominally equivalent to "domiciliary consultations."

2. The extraction fee should be increased when the anaesthetic is given by a specialist, in recognition of the better standard of dentistry which will result.

3. The regulations concerning "special" — i.e., endotracheal — anaesthetics should be revised. In my opinion the extraction of 10 or more teeth indicates intubation.

4. The limitations of non-intubational methods of anaesthesia where multiple extractions are concerned should be clearly acknowledged and taught. At the B.D.A. Annual Meeting in Oxford on July 26 Dr. J. G. Bourne recommended a limit of one and a half minutes for "traditional" dental surgery anaesthetics.

5. The dentists should consider whether or not they wish to be trained to perform tracheal intubation.

The Ministry's policies have led to wilful neglect of the established principles of anaesthesia for the surgery of the mouth. The known results of this fall far short of what could and should be achieved. They are listed as follows:

(a) 132 dental anaesthetic deaths in 10 years (as reported by Dr. V. Goldman at the B.D.A. meeting held in Oxford on July 26).

(b) An unknown number of damaged brain and lung cases.

(c) Long queues at the hospitals for work which could be carried out in the dental surgery, but for professional and public concern about dental anaesthesia.

(d) A poor standard of dentistry for the anaesthetized patient because of the race against time imposed by non-intubational methods and the poor operating conditions they provide.

The existing specialist anaesthetists could easily improve on all these results but have not been asked to by most dentists.—I am, etc.,

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Cadaveric Renal Transplants

SIR,—In the recent papers on human cadaveric transplants by Dr. K. A. Porter and his colleagues and by Mr. R. Y. Calne and his associates (September 14, pp. 639 and 645) priority for a well-documented series of cadaveric renal transplants is assigned to Hume and his co-workers.¹

It is not clear, however, that they are aware of a Canadian report in 1954 of an apparently successful cadaveric renal transplant by Drs. G. Murray and R. Holden.² While Drs. Murray and Holden acknowledged the possibility that the patient in question might have regained her health independently, nevertheless they described a clinical course of events which makes this seem unlikely, and which leads one to attribute the

salutary outcome of the case to the transplanted kidney.—I am, etc.,

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Emergency Suprapubic Catheterization

SIR,—A common emergency admission to hospital is the elderly man with an acute retention of urine. When this is secondary to a benign prostatic enlargement some surgeons advocate immediate prostatectomy as the treatment of choice; Wilson Hey in 1945,¹ and others since, have shown that this is safe. Nevertheless a widely adopted procedure is first to catheterize the patient per urethram; next, to maintain closed bladder drainage for one or more days whilst a full pre-operative assessment is made; and then, if he is fit, to carry out a formal prostatectomy during a routine theatre list.

Urethral catheterization is uncomplicated and relatively simple on most occasions; but occasionally great difficulty is encountered and not even the finest plastic catheter (for example, Gibbon's) can be inserted. Repeated unsuccessful instrumentation traumatizes the prostatic urethra and causes oedema, if not frank haemorrhage. The passage is consequently narrowed still further and bacterial infection is encouraged. At this stage it is reasonable to employ a suprapubic approach to the bladder; an excellent modification is the method described by Riches,² but it requires a special trocar-introducer and catheter. Moreover Riches's technique is rather specialized and beyond the scope of junior medical staff—particularly when it is not used routinely, and therefore not demonstrated to them, by their seniors.

An alternative procedure is to drain the urine with a lumbar puncture needle inserted into the bladder from immediately above the symphysis pubis.³ This carries several disadvantages, however, and an important one is that the rigidity of the needle prevents its point from remaining safely inside the bladder as the latter empties and contracts. The method described below is a simple variation which can be used by a house-surgeon, although it should be emphasized that it is not intended as a substitute for urethral catheterization.

Only a minimum of readily available equipment is required. This includes an intravenous needle of reasonable size (e.g., size 16 B.W.G.) and a "polythene" catheter which is capable of being threaded through the needle (e.g., size 1 with an external diameter of 1 mm.). The catheter should be long enough to stretch from a position within the patient's bladder to a drainage bottle, or plastic bag, at the side of the bed.

Having shaved and prepared the suprapubic skin a little local anaesthetic is in-