SIR,—Your leading article (24 May, p. 464) on this subject provoked a disappointingly short correspondence. Like Professor J. H. Middlemiss (11 October, p. 107) I felt that the main issue rapidly became lost.

Universities will obviously continue to express their ideas regarding educational priorities in general. It is up to faculties of medicine to provide the essential support for academic departments of radiology. At present universities are not greatly concerned with postgraduate education. The coming of Todd¹ may provide the necessary stimulus, and indeed health departments may find themselves in the position of making a case for additional academic units. It is my belief that radiology in the United Kingdom has a poor "chance" in the absence of the energetic support of both these bodies.

Radiologists are well aware that academic development in radiology cannot be hurried, but they would like to see a definite start being made.—I am, etc.,

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REFERENCE

- ¹ Royal Commission on Medical Education, 1965–68: Report 1968, Cmd. 3569. London, H.M.S.O.

Follow-up after Abortion

SIR,—We reported earlier (22 February, p. 506) some preliminary impressions of our experience in this area of all patients referred for termination of pregnancy since the Abortion Act came into force.

The women referred were given a full psychiatric interview before deciding whether termination should be carried out. Of the 72 cases referred, there were 53 married or cohabiting and 19 were unmarried women. Fifty-nine of the 72 women were accepted for termination. This included 45 of the 53 married women and 14 of the 19 single women. A conscientious attempt was made in all cases to follow the guide lines of the Abortion Act. Termination was advised when the psychiatrist considered that continuation of the pregnancy would involve a greater burden or greater emotional strain than the woman should be expected to endure or could be expected to tolerate. The state of the marriage (or absence of marriage), the number of young children, and closeness of recent pregnancy or pregnancies and the economic situation were all considered in relation to the woman's psychiatric state, especially the degree of depression, her estimated stability, and her personality.

The follow-up of all these cases has confirmed the preliminary impressions previously reported. Of the 13 cases rejected at the time of referral, the final outcome so far as the mother is concerned may be considered as satisfactory. Minor symptoms only have been mentioned in two cases. In the 59 cases accepted for termination 45 of these were found to be completely well, without any self-reproach or psychiatric symptoms which could possibly be related to the termination. These included seven who were specially enthusiastic, claiming that they had "never felt better" or some similar statement. The 45 cases included three cases where pre-pregnancy psychiatric symptoms existed. No deterioration occurred in any of these, and in fact one was slightly improved at the time of review. The 10 cases who had at one or other

or both reviews shown some self-reproach were only mildly inconvenienced by these feelings, and the social worker obtained the impression that in some cases the women seemed to think that this was what they were expected to say. In none of the cases did the feelings expressed or the condition of the patient constitute an illness or disturbance warranting psychiatric treatment.

The follow-up period is still relatively short, although other studies, especially that of Höök,¹ have shown that where difficulties or symptoms have occurred they have occurred earlier rather than later. The results so far confirm those of the preliminary survey in that none of the cases followed-up have shown any significant psychiatric symptomatology which could be related either to the termination of the pregnancy or to rejection of the request for abortion.—I am, etc.,

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REFERENCE

- ¹ Höök, K., *Acta Psychiatrica Scandinavica*, 1963, 39, Supplement 168.

Premedication for Hypotensive Anaesthesia

SIR,—I have read with interest Dr. P. J. Thompson's letter (2 August, p. 300), as, with small but important differences, we have been using similar techniques for aural surgery for many years.

Until early this year our procedure was as follows: Premedication with papaveretum 10 mg., hyoscine 0.4 mg., and haloperidol 2.5 mg. given 1–1½ hours prior to induction. Induction was with sodium thiopentone 250–400 mg. suxamethonium 75 mg. followed by intubation. Maintenance was achieved with mild hyperventilation with N₂O:O₂ (2 l./m: 1 l./m) in a closed circuit using an East Radcliffe ventilator with negative pressure during the expiratory phase. On the return of spontaneous respiration, D-tubocurarine chloride 20–30 mg. was given, and increments of curare and thiopentone were given when indicated during operation.

The external auditory meatus was infiltrated with lignocaine and adrenaline and the table tilted about 10° head up. By these means systolic pressure was reduced to 80–100 mm./Hg and in most cases satisfactory operating conditions ensued. This year we have introduced fentanyl 0.2 mg. about five minutes before induction with increments of 0.1 mg. as indicated. Otherwise the anaesthetic is conducted exactly as before except that less thiopentone is used. (150–300 mg.)

Like Dr. Thompson I find that the blood pressure does not fall as readily or as far since using fentanyl, but I still do not experience troublesome bleeding. I cannot explain why fentanyl should appear to block the hypotensive action of halothane, but suggest that, as halothane is a potent vasodilator, if the pressure does not drop, bleeding may be troublesome. Atropine too produces tachycardia and an increase in cardiac output which, when I have allowed bradycardia to frighten me into giving it, has elicited immediate surgical protest about bleeding. I have always used intramuscular hyoscine as a premedicant, feeling that its vagolytic action is adequate and its sedative and amnesic properties a useful adjunct. I do not think the butyrophenone derivatives affect the issue in either direction, but I prefer to use halo-

peridol for its more prolonged anti-emetic effect.

Dr. Thompson does not say whether he uses negative pressure during the expiratory phase—I do, having an unproved and purely clinical impression that it minimizes venous congestion and helps to reduce bleeding.—I am, etc.,

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SIR,—I read with interest the letters of Dr. P. J. Thompson (2 August, p. 300) and Dr. F. S. Keddie (4 October, p. 51) concerning premedication for induced hypotension. Their experiences certainly do not accord with my own. For some time I have used droperidol 5–10 mg., papaveretum 10 mg., and atropine 0.6 mg. as premedication prior to inducing hypotension. Induction of anaesthesia has been with either a further dose of droperidol 5–15 mg. followed by fentanyl 0.4–0.6 mg. with suxamethonium to aid intubation, or thiopentone followed by D-tubocurarine prior to intubation.

Both groups are ventilated with oxygen and nitrous oxide, and fentanyl 0.05–0.1 mg. is given to all patients to maintain adequate analgesia. Hypotension is induced with appropriate doses of either pentolinium or trimetaphan. I have found this technique to give satisfactory results in almost all patients. Tachyphylaxis and tachycardia are uncommon, and the latter can usually be controlled with a small dose of propranolol.

I would agree with Dr. Keddie in questioning the rationale of giving atropine 0.6 mg. at induction. Satisfactory operating conditions will not be produced in the presence of a tachycardia. It would be interesting to know if Dr. Thompson's results could be improved by omitting the atropine. I agree that cardiovascular stability is a feature of anaesthesia after droperidol premedication, but do not agree that its use prior to induced hypotension is contraindicated. Indeed, Larson¹ has reported a series of 25 patients premedicated with droperidol and atropine and induced with a further dose of droperidol and fentanyl. Hypotension was produced with ganglion-blocking drugs, and he states, "Ease in controlling the level of hypotension, and absence of tachycardia and tachyphylaxis, were noted."—I am, etc.,

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REFERENCE

- ¹ Larson, A. G., *Lancet*, 1963, 1, 128.

"Prune-belly" Syndrome

SIR,—Some children born with congenital defect of the abdominal muscles have the "prune-belly" appearance in early life, but the term is generally applied to older children where there is characteristic irregular distension, especially when intra-abdominal pressure is increased.

It has been pointed out that if a binder is applied to the abdomen from the earliest days the end result can be appreciably improved. Presumably the existing muscle elements are protected and enabled to grow across more effectively to fill the gap. This has been documented photographically,¹ and