Act, which means that to some extent they should be within a locked ward. I find that if we do not let them out on parole, even after two or three years in some cases, the staff that look after them occasionally accuse us of being too strict. If, on the other hand, and these cases are not uncommon, a patient behaves extremely well under supervision and we let him out on parole and he commits another serious offence we are held to be totally irresponsible.

I think there should be some form of establishment between a hospital such as this, which is, in the main, an open hospital, and a place like Rampton Hospital. At present, so far as I know and certainly so far as South Wales is concerned, there are no proper facilities of any sort to deal with these patients. I would be grateful for the comments of others on this problem. It is still my opinion that the public, to a large extent, do not understand the subnormal patient and are in many instances afraid of him.—I am, etc.,

D. C. JONES

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Glamorgan

Prostaglandins and Glaucoma

SIR,—A substance capable of contracting the rat stomach strip has been found in greater quantities in aqueous humour from patients with open-angle glaucoma than in aqueous humour from patients with cataracts.[1] The activity seemed to be due to prostaglandin E_1. Prostaglandin E_1 has been noted to elevate intraocular pressure and induce an inflammatory response in animals.[2] Thus it was postulated that prostaglandin E_1 has a role in the causation of open-angle glaucoma.[1]

We have measured prostaglandin E_1 in the aqueous humour of patients with and without primary open-angle glaucoma both at the time of cataract extraction and as acquired by paracentesis in a few outpatients. None of the patients had inflammatory disease. The radioimmunoassay[3] utilized to measure concentrations of prostaglandins is specific for PGE and is readily applicable to the assay in aqueous humour. We have used this immunoassay to measure raised PGE concentrations in aqueous after application of PGE_1 to the monkey cornea. Because of the limited sample size (0·05 ml) prostaglandin E_1 levels lower than 200 pg/ml were not accurately measurable. In this small series no significant difference was noted between aqueous humour from glaucomatous and non-glaucomatous eyes with regard to levels of prostaglandin E_1. One control patient with uncomplicated senile cataract had a much higher result than all of the other patients.

Prostaglandin E1 (ng/ml) in Human Aqueous

How obtained	Cases	
	Open-angle Glaucoma	Other
At operation	<0·20	0·39
	<0·20	0·41
	<0·20	0·46
		2·56
		<0·20
By paracentesis	0·44	0·45
		<0·20
		<0·20

The discrepancy between our preliminary results and those previously reported would indicate that further experience is necessary of measuring each of the prostaglandins in specimens of human aqueous humour by specific assay before any conclusions should be drawn about the aetiology of open-angle glaucoma.—We are, etc.,

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BERNARD M. JAFFE
BERNARD BECKER

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1 Wyllie, A. M., and Wyllie, J. H., *British Medical Journal*, 1971, 3, 615.
2 Beitch, B. R. and Eakins, K. E. *British Journal of Pharmacology*, 1969, 37, 158.
3 Jaffe, B. M., Smith, J. W., Newton, W. T., and Parker, C. W., *Science*, 1971, 171, 494.

Vasectomy in the Surgery

SIR,—I note there is some interest at the moment in general practitioners undertaking vasectomies under local anaesthetic in their surgeries. I also considered this, but thought I should first carry out a number of vasectomies under general anaesthetic with consultant supervision. After some 30 vasectomies I found this method anything but easy. The vas is extremely mobile, is often difficult to locate, and once located and pinned beween three fingers can easily slip and become lost. It is ofen difficult to isolate among the layers of tunica vaginalis and on several occasions I mistook this for the true vas. Even when the vas had been isolated, secured, and a piece removed tying the two ends can be quite complicated. The stitch can slip unless one is fairly adept at this, and the end of the vas, especially the distal end, can disappear from view and, indeed, be very difficult to recover.

None of the vasectomies which I have observed carried out under local anaesthetic have been completely painless, and, in my opinion, the fairest method for the patient is that the operation should be carried out under a general anaesthetic. I do not feel that it is a procedure ideally suited for general practice.—I am, etc.,

E. RONALD SEILER

Edinburgh

Anaesthesia by Acupuncture

Sir,—Dr. M. A. E Ramsay (16 September, p. 703) raises the points about the basic problems of an open chest and collapsed lung during acupuncture anaesthesia, and asks for more details..

During our visit to China I was present at two lobectomies. At Cheng Hwa Hospital, Shanghai, on 17 March we watched a tuberculous area of a lung (not fully cured after two years of medical treatment) being removed under acupuncture by one needle in the deltoid region vibrated manually. At Nanking General Hospital, on 1 April, we watched the removal of the right lower lobe from a woman aged 30 years, a mother of three children, suffering from bronchiectasis. In this case anaesthesia had been attained by using five needles—two in the right forearm, two in the front of the chest, and one in the back. These were vibrated with a small electric current

The operation had started at 9 a.m. I arrived at 10.15 a.m. I noted that the patient's general condition was good, that she was having a small blood transfusion, that her blood pressure was being charted regularly and remained steady at 110/80, and her pulse 64, normal, and regular. The right side of the chest had been opened and the right lung was completely collapsed (she was lying, of course, on her left side). The fully conscious patient was breathing chiefly with her abdominal muscles and diaphragm, having been taught to do so during the week before the operation. One of our group, Dr. Kathleen Rutherford, was sitting with her talking to her about her family with the help of an interpreter, and from time to time Dr. Mary Hollington gave her water to drink. Unfortunately, there were many adhesions between the bronchus and main blood vessels so the operation was long and tedious, but there was very little bleeding indeed. I left after about an hour. The patient was still in good condition though she had admitted a little discomfort when the mediastium was pulled by the surgeon. (During the operation the main lights of the theatre failed for 3 minutes, but the operation continued with the use of torches).

The above description is written from notes made in the theatre at the time. I might add that I have been in general practice for over 25 years so cannot speak with authority on anaesthesia or surgery. I write what I saw, and I was astonished.—I am, etc.,

S. G. HAMILTON

British High Commission Hospital,
New Delhi, India

Sir,—I would like to try to reply to the letter of Dr. M. A. E. Ramsay (16 September, p. 703) concerning thoracic operations under acupuncture anaesthesia. In the two operations of this nature that we witnessed in Shanghai and Nanking the patient was fully conscious throughout the procedure. We were able to converse with the patients while the operations were being performed and they did not seem to be unduly distressed when the chest was opened. There was some discomfort when traction was applied to the bronchus but none during incision. No form of assisted ventilation was used so it would appear that acupuncture anaesthesia has overcome the basic problem of the open chest and collapsed lung. Before operation the patients are instructed for several weeks in correct breathing so that they will not be distressed when the lung is collapsed. I would like to pay tribute to the courtesy of the Chinese surgeons who answered all our questions and allowed us to photograph the operations.—I am, etc.,

P. E. PEARCE

Christchurch, Hants

SIR,—In reply to Dr. M. A. E. Ramsay's question (16 September, p. 703) concerning acupuncture anaesthesia and the open chest with its concomitant problem may I add the following comments to help clarify the point.

Patients for acupuncture anaesthesia are carefully selected and there is a 20% failure of likely candidates. The selected cases are given a week of intensive physiotherapy prior to the operation to enable them to have some breathing control. Before the pleura is entered, 4% amethocaine is applied to its surface and at the same time pethidine is being run into the circulation by an intra-