Removal of the prostate under strictly aseptic conditions is an end to be aimed at, but it seems a little doubtful whether it has yet been achieved. The hateful catheter must be used after the operation if not before, and when the catheter is used infection cannot be avoided. Of the patients operated on "aseptically" four out of five are grossly infected when they leave hospital, and the fifth is only sterile because he has been treated with streptomycin for some dire complication—that is, pyelonephritis. In spite of all precautions no patient escapes gross infection and 20% develop a very serious type of infection. It is fair to assume that this infection is present before the catheter is removed on the fifth post-operative day in the ordinary case, and that it commences some while before that—in fact not very long after the time of operation. Is it worth while then taking a uraemic patient straight to the theatre in order to operate on a field which, though clean at the moment, is bound to become contaminated so soon?

There is another matter to be taken into account. In some of these cases prolonged back pressure is apt to produce an atonic bladder, and when the catheter is removed on the fifth post-operative day micturition is not restored. The catheter must be reinserted and perhaps left for as long as two or three weeks before the bladder regains its tone and the patient learns to pass water without help. Would this enforced drainage not be better before operation rather than after, when the defences have been breached and the prostate bed is raw? Is there not still a place for cystotomy in the bad case? Or for catheterization carried out with the full ritual of asepsis in a well-equipped hospital ward? Whatever the inadvisability of catheterization in the home, surely catheterization in hospital can be carried out without mishap? Should the worst happen, an infection limited to the lower urinary tract is rarely fatal. If the drainage is uninterrupted and the patient is kept in the erect position, whether sitting up in bed or up and about the ward, the chances of ascent are minimized.

We congratulate ourselves on losing far fewer of these patients than we used to, but there are other reasons for this than midnight operations. Improved anaesthesia, close attention to fluid and electrolyte balance, and scrupulous care that drainage, whether before or after operation, is maintained without the slightest interruption play their part. Antibiotics must be given more credit than anything else for lowering the mortality of the operation. Even in "aseptic prostatectomy" streptomycin seems to play a leading role.

No one passes a catheter or a cystoscope unnecessarily on a "prostatic," but, if the alternative is an immediate operation on an ill patient who has never been seen before, one may be excused for being old fashioned. Delay not only allows for reasonable investigation and preparation, it often leads to the discovery of some vital fact that might be completely overlooked on the journey between the ward and the theatre.—I am, etc.,

London, W.1. STEPHEN POWER.

Kwashiorkor

SIR,—Recent animal-feeding experiments and the articles on kwashiorkor (October 11, p. 796) demonstrate forcibly the necessity for providing infants and children with large quantities of protein during their rapid growth period. This protein must not only be economically available but must also be biologically suitable to the human organism. Two factors to be taken into account are (*a*) the ingestion of suitable protein with the various additional factors (vitamins, etc.), and (*b*) the intestinal flora which utilizes the amino-acids for resynthesis, and manufactures vitamins, etc., and various other biochemical reactions not yet evaluated.

Thus the problem of kwashiorkor can be dealt with along two lines: (*a*) The provision of animal protein by giving meat or meat products, which automatically adds the necessary additional factors and does away with the need for complicated diets. This is balanced nutrition and is ruled out by economic difficulties. (*b*) Modification of the intestinal flora to receive non-animal protein so that extra synthesis can take place in the gut. That the human organism can take in large amounts of non-animal protein and manufacture its own vitamin is a tribute to the adaptability of the human body. That this strain is unequal in growing children is shown by the diarrhoea and unformed stools in the early treatment of kwashiorkor with vegetable protein.

However, if the gut is first made receptive by a course of succinylsulphathiazole and then a suitable bacterial culture is swallowed, the bowel becomes modified to meet changing conditions, and the intestinal flora, differently constituted, can deal with larger quantities of vegetable protein with the resultant synthesis of vitamins and other factors. It is along these lines that further progress in nutrition can take place.—I am, etc.,

Watford. CHARLES ROTMAN.

Paralytic Ileus

SIR,—The article on "Relation of Electrolyte Changes and Adrenocortical Activity to Paralytic Ileus" by Dr. D. H. P. Streeten and Mr. J. N. Ward-McQuaid (September 13, p. 587) must give cause for intensive thought. As one who has had considerable success in dealing with this post-operative catastrophe I commend the writers for their careful investigative approach but take the liberty of disagreeing with their interpretation of their findings.

In a patient who loses chlorides to excess by vomiting and suction there must be a transference of intracellular potassium into the blood stream, and if this is so potassium excretion via the kidneys will become excessive. In 5 of 10 cases they found intracellular depletion of potassium. It is interesting to find that in patients with lowered sodium and chloride levels in the blood stream there are also positive indications of enhanced adrenocortical activity in the form of eosinopenia and increased excretion of 11-oxysteroids.

I think it would be wrong to interpret this increased activity as being the proximate cause of the ileus through an acceleration of potassium excretion. After all, eosinopenia indicates nothing more than that the adrenal output of hormones is sufficient to banish these cells from the circulation. My view is that the adrenocortical activity is the direct response to stressor factors and that the output of hormones, while being the maximum of which the individual glands are capable, may be quantitatively far short of the amount required to counteract the stress. Augmentation of the patient's output by parenteral administration of hormones will pay dividends and will lead many patients out of the danger zone in a rapid and dramatic manner. Naturally it is necessary at the same time to replace potassium and balance the electrolytes as part of the therapy. If a test is required which will assess the danger and give an index of response to therapy it is contained in the recording of the blood urea. In all these cases the initial figure is high and with favourable response to therapy the fall is steady and sustained.

We are still left with the necessity of elaboration of a theory which will account for the post-operative intrusion of acute paralytic ileus. I believe it to be a histamine effect and that this noxious amine is generated from histidine in the bowel contents by putrefactive organisms which happen to be present in the particular, but not in all, individuals. The theory is capable of a great deal of supportive argument, but this is not possible in a letter of this description.—I am, etc.,

Durban, S. Africa. J. DRUMMOND.

Removal of Sutures

SIR,—Dr. Geoffrey Barber's suggestion (November 15, p. 1103) of using a knife instead of scissors for removing sutures seems an excellent one. A further refinement I have found valuable is to leave the stitches *in situ* after they have been cut. The majority work out painlessly in a day or two, the others can be picked out without any sticking. Apart from the prevention of pain, this device obviates any split-

ting of the wound or oozing from the edges or the stitch holes as a result of tugging on the divided stitches impeded by the presence of adherent dried blood. Incidentally, this tugging may cause as much pain as cutting the sutures with scissors. If tension or mattress sutures have been used the advantage is even greater, the divided stitches still giving a little reinforcement to the wound, which is not left completely unsupported in one fell swoop but is allowed to flatten out gradually as the stitches slowly relax. For the same reason, in long mastectomy wounds alternating stitches should be cut judiciously in three or four instalments, at each cutting the previously divided stitches being picked out. This procedure, together with Dr. Barber's, will rob "stitches" of all their terror.—I am, etc.,

London, W.1. A. DICKSON WRIGHT.

Postgraduate Training of Overseas Graduates

SIR,—Having read the excellent article on postgraduate education by Sir Francis Fraser (August 30, p. 455), and also the excellent reviews in the same number of your *Journal*, I would like, as a junior member of the staff of one of the Universities in India, to offer my criticisms of the facilities for postgraduate training of graduates from overseas—especially those from the Far East.

We have undergraduate teaching colleges, but we rely upon you for the training of our postgraduates. The West, especially England, is looked upon by the East as the temple of medical sciences. What is the West contributing in way of inspiring the art of teaching medicine? Perhaps a lot, but the younger generation of to-day feels dissatisfaction with the way in which the various teaching courses are organized. Are six weeks' intensive theory, week-end courses, and clinical conferences sufficient? Will a person trained thus be fit enough to teach or impart knowledge to others? Most of these courses concentrate on the points favoured by a particular examiner and the "regular" patients and the few odd potted specimens. If successful in the examination at the end of such a course, the candidate thinks of returning home and ignores the excellent opportunities for practical training offered to him under the new scheme. The student community are to blame, because they become the moving advertisements of certain coaches or courses for a particular diploma. The teaching hospitals are to blame for running diploma courses instead of postgraduate training as described in your *Journal*.

I would say that various teaching hospitals in London or outside are not serving a very useful purpose by running diploma courses, while much of the clinical material is being wasted, not only in London but all over the country. The very pattern of these courses does not agree with the present concepts of postgraduate training as defined in your *Journal*. I would therefore appeal to the senior members of our profession to reorganize the postgraduate courses run in these hospitals, with a view to training and not for any particular examination. Such courses should run for longer terms, say, six months at least, and any graduate with some clinical background should be allowed to attend. This would not only reduce the number of recent graduates who return prematurely, but also provide postgraduate trainees who would be an asset to their country, even if unsuccessful in obtaining a diploma. A bad examinee can be a good trainee and later on prove to be a good clinician.

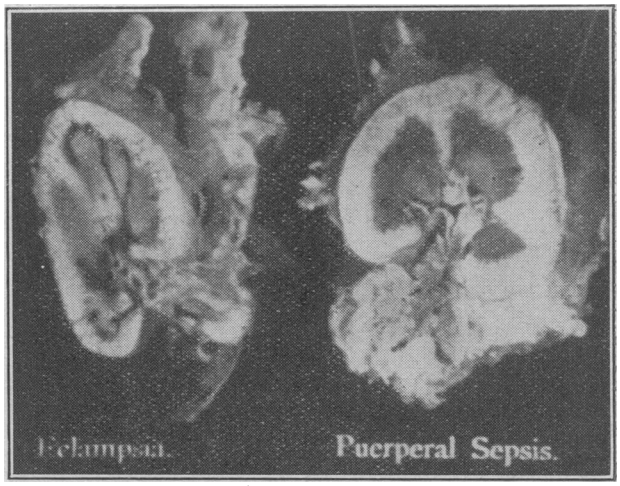
May I make it clear that I am not criticizing the system of higher examinations, but the way in which a candidate is prepared for them? It is now necessary in England, before reaching the stage of senior registrar, to have practical experience in a special field and a higher general qualification. For those coming from abroad, straining at higher qualifications, it serves no useful purpose, because after a hard struggle on limited resources for two or three years both the successful and unsuccessful return home at the same stage of their practical training as they were at prior to coming to this country.

I hope serious consideration will be given to this problem, because we, coming from abroad, entirely depend on your country for our postgraduate training. You are fortunate in establishing contacts with American and Continental colleagues. Let us have the opportunity of being accepted as your contacts, and learn from your restrained practical outlook. Allow us to be linked with you as members of the Commonwealth of Nations on the same footing as Australia, New Zealand, Canada, and South Africa.—I am, etc.,

Alton, Hants. R. N. SHARMA.

Block for Bisecting Kidneys

SIR,—I was much interested in reading Dr. R. A. McInroy's letter (November 8, p. 1045) on the above. The advantages of such a block for obtaining really flat surfaces and avoiding injury to one's hand are apparent, and it should be of value in the preparation of museum pieces—for those content to inspect longitudinal sections. But there is another way of incising the kidney which perhaps is even more instructive, and that is by dividing it transversely. The



present block could easily be modified for that purpose by making vertical slits in its sides like those at its ends.

Longitudinal sections of the kidney are excellent for inspecting the cortex and medulla, but they do not indicate how the cortex envelops the medulla as will transverse sections. On looking at a longitudinal section of the kidney the cortex and medulla might be separate parts of the organ, as they seem to be in the case of the suprarenal body. There is no suggestion, such as is given by a transverse section, that a physical relation between the two exists, or may exist. With transverse sections, the idea that if the blood cannot readily traverse the cortex it must be thrust into the medulla becomes possible. Moreover, with longitudinal sections there is no indication that during life the kidney may have been more compressed in one case than in another. Transverse sections do at times suggest this.

The accompanying excerpts from a film made several years ago on the "Kidney in Eclampsia" show a transverse section of a kidney from a case of eclampsia side by side with one from a case of puerperal sepsis. The appearances are greatly different—in the one the kidney looks as though it had been compressed, in the other it appears distended. Such difference, I think, would not have been indicated by longitudinal sections.—I am, etc.,

Rugby. R. H. PARAMORE.

The Patient's Verdict

SIR,—Dr. David Hardie's criticisms (November 22, p. 1151) of Lord Moran's opinions, as expressed in his Harveian Oration, emphasize the importance of the present moment in the history of medicine. It seems that Lord Moran would have us believe that progress based on science is automatic—a view that is untenable now that it is clear that much of scientific advance is only progress towards destruction.