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-