peutic range" in seven of these. One patient (No. 9) developed a deep haematoma of the calf after minor injury and transient haematuria. Further, eight patients were eventually restabilized only on a dose of warfarin lower than might have been expected from the original phenindione dosage.

Other centres may be considering changing patients from phenindione to warfarin, and it is suggested that the initial maintenance dose of warfarin should be less than that normally calculated and that fairly close monitoring of the prothrombin time might be instituted for the first few weeks after the transfer.—I am, etc.,

J. LESLIE.

Royal South Hants Hospital,
Southampton.

REFERENCE

- ¹ *British National Formulary*, 1968, p. 59. London, British Medical Association and Pharmaceutical Society of Great Britain.

Control of Anticoagulants

SIR,—Your leading article (18 October, p. 125) reports that the test used to control treatment is the one-stage prothrombin time. Dacie and Lewis¹ state that "occasionally, because of prothrombin or Factor IX deficiency, a patient on long-term anticoagulant therapy may begin to bleed although the Quick one-stage result is well within the generally accepted therapeutic range. There is no doubt, therefore, that the Quick one-stage is far from the perfect test. It has, however, the great merits of simplicity and speed, and is still very widely used."

In practice the Thrombotest is a reliable reagent which gives good results on finger-prick specimens and a degree of uniformity between laboratories.² The latter fact is surely of importance. The fact that the Thrombotest can be performed on a finger-prick specimen is another advantage when laboratories are understaffed and work-loads are increasing.

It would seem to me, from past experience, having performed both Quick one-stage and Thrombotest, a retrograde step to have to venepuncture every long-term anticoagulant patient, with the resulting increase in cost for syringes, needles, labour, and time in collecting samples and preparing suitable anticoagulant containers.—I am, etc.,

J. GOBERT-JONES.

West Suffolk General Hospital,
Bury St. Edmunds,
Suffolk.

REFERENCES

- ¹ Dacie, J. V., and Lewis, S. M., *Practical Haematology*, 1968, 4th ed., p. 309. London, Churchill.
- ² Poller, L., ed., in *Recent Advances in Blood Coagulation*, 1969, p. 141. London, Churchill.

Immunological Treatment of Cancer

SIR,—Professor G. Mathé (4 October, p. 7) once more calls attention to the important part played by immune response in the "control" of cancer, but the intricacies of the mechanism are far from being understood.

The radiotherapy department of this hospital has a combined hormone, chemotherapy, and immunological clinic. For the past few years a constant stream of patients has been put through a delayed hypersensitivity skin

test programme in which over 1,000 complete tests have been done, using both varidase and tuberculin as general indicators. It was felt advisable to be very conservative in selecting the methods for sequential testing in order to render them as safe and comfortable as possible. It is fully realized that such a test programme for cancer is quite non-specific, and, indeed, at the most only general conclusions can be drawn from a sequential, graphically recorded test programme. Somewhat similar attempts at immunotherapy have, in part, been employed as those seen in use in Nairobi. These comprise the administration of B.C.G. (also used by Professor Mathé), triple vaccine, and smallpox.

Certain suggestions emerge from looking at the graphs. These are:

- (1) That the person who is being overcome by cancer has a declining response.
- (2) That the person in whom host resistance to cancer is "demonstrated" may have a favourable response.
- (3) That in patients successfully treated by irradiation for advanced disease and in whom survival was not expected a favourable test response may be obtained.

(4) That the primary immunological response may be damaged by cytotoxic drugs, steroids, radiotherapy, and extensive surgery.

It is suggested that the effect on the response is dependent upon the magnitude of the procedure: small things do nothing, moderate do some damage, and large procedures may depress the response for some considerable time. With radiotherapy it is clear that, if the technique for breast cancer is modified to administer "small" volume node dose, thus avoiding "block irradiation," the immune response may not be disturbed. If, after an interval, the second node area is irradiated, no disturbance may accrue. This is quite different from routine irradiation of extensive areas as practised in many clinics.

(5) It has been noted that, after the ablation of cancer by "limited" surgery, the response to skin testing may rise. This has also been noted with radiation, in which an overswing of response has been recorded—that is, a temporary drop and then a rise to a higher level. Further, regarding surgery, we know that the presence of an appreciable number of cancer cells in the blood after operation does not always mean the early demise of the patient. It follows, therefore, that the defence mechanism must be powerful in some instances. Nevertheless, surgeons of experience have all seen severe exacerbation of cancerous growth following operation on advanced cases. The defence mechanism is, therefore, probably unduly stressed.

It appears possible that, given some degree of immunological booster which would control the growth of cancer, small radiotherapy beams directed with accuracy on limited residues of malignancy may produce dramatic results. Indeed, in the hormone clinic here this principle has been tested in that some advanced breast cancers with metastases have been "controlled" and radiation then given to limited parts with apparently improved results. Clinical impressions are notoriously fallible; one swallow does not necessarily make a summer, but when most are flying in the same direction it is certainly suggestive.—I am, etc.,

ANTHONY GREEN.

Royal Northern Hospital,
London N.7.

Meckel's Diverticulum Causing Obstruction in a Neonate

SIR,—Meckel's diverticulum is commonly asymptomatic and an incidental finding at operation or post mortem, but it can produce a wide range of symptoms. It may produce abdominal pain simulating appendicitis, cause intestinal haemorrhage or perforation, or present dramatically with acute intestinal obstruction. Obstruction may be produced in a free diverticulum or when the diverticulum or its terminal ligament is attached to the umbilicus, abdominal wall, mesentery, or any other abdominal viscera.¹

I wish to report a case in a three-day-old infant which falls in the first, rarer group. The mechanism of the obstruction was unusual, and therefore considered worth recording.

A full-term female infant weighing 3.5 kg. was quite well at birth and passed meconium normally. At two days she started vomiting bile and the abdomen became distended. She was admitted to Royal Manchester Children's Hospital the next day, and clinical and x-ray findings were suggestive of a small bowel obstruction. At laparotomy she was found to have an obstruction at the site of a Meckel's diverticulum, the bowel proximal to it being very dilated. The diverticulum was free—that is, not attached to the umbilicus or any other structure. It had a mesentery running to the adjacent ileum and the ileum was acutely kinked proximal and distal to the diverticulum. The obstruction was treated by local resection of the ileum with an end-to-end anastomosis. Postoperatively she had a rather prolonged ileus but recovered well.

Histological examination of the specimen showed small bowel mucosa only and no heterotopic tissue.

Aitken² reported on 18 cases with a band obstruction in relation to Meckel's diverticulum and the ages of his patients ranged from 3 days to 11 years.—I am, etc.,

SAEED AHMED.

Royal Manchester Children's Hospital,
Pendlebury, Lancs.

REFERENCES

- ¹ Romig, R. S., *Archives of Surgery*, 1961, 83, 262.
- ² Aitken, J., *Archives of Diseases in Childhood*, 1953, 28, 1.

Mite Infestation

SIR,—The interesting letter by Drs. E. Freeman and M. S. Kataria (4 October, p. 53) describing human infestation with the poultry mite *Dermanyssus gallinae* prompts us to record our own observations.

In October 1967 two small children were referred by their family doctor because of persistent scabies of typical distribution. Their mother drew attention, however, to tiny "insects" crawling on the bathroom wall. Although initially no connexion was suspected, some of these creatures were submitted to the laboratory for examination. They were identified as *Dermanyssus gallinae*, a mite usually associated with poultry, but frequently infesting starlings and capable of producing scabies-type lesions in man. In view of this, a search of the patient's home was made, and starlings' nests were found in the space through which the bath waste pipe made its exit from the house. Removal of the nests and spraying with a D.D.T. preparation destroyed the mites; the "scabies" rash rapidly cleared with benzyl benzoate treatment and did not recur.

The following summer, during the routine examination of school "leavers," a girl aged 15 years was seen with a rash of typical distribution thought to be scabies. She was asked, largely by chance, if there were any starlings' nests at her home, and she replied that the loft was full of them. A visit to the house confirmed that this was so, the birds having gained access to the loft through a missing tile in the roof. The loft communicated directly with the girl's bedroom by an open ventilator in the ceiling. Nesting material was collected, and the presence of *Dermanyssus gallinae* again confirmed. Similar measures to the loft and bedroom coincided with early and complete recovery of the patient.

Though not perhaps common, it is of some importance to identify these creatures correctly, since infestation may recur despite treatment, as it did in two of our patients, if nesting material is not destroyed. Spontaneous recovery, however, should normally occur if the source of the mites is removed.—We are, etc.,

J. REED.

Health Area Office,
Wadebridge, Cornwall.

M. HEWITT.

G. I. BARROW.

Department of Dermatology,
and
Public Health Laboratory,
Royal Cornwall Hospital (City),
Truro, Cornwall.

Accident Equipment

SIR,—When discussing plastic laryngoscopes Dr. Peter Aston (25 October, p. 214) writes: "The only disadvantage of the Penlon is that the batteries have to be stored separately until required."

May we point out that there is no more reason for batteries to be stored separately with the Penlon than with any other laryngoscope, metal or plastic. The instrument should certainly be turned off reliably, and this can best be done by giving the cap an extra twist after the light goes out. A modification is now being introduced to the instrument which will give positive indication to the user when a safe position has been reached. There is a risk of battery leakage and subsequent damage in any battery-operated instrument, a fact which we acknowledge in common with the manufacturers of automatic cameras and electronic devices. The degree of risk depends not on the instrument but on the period between use or inspection.

Those who are responsible for emergency equipment must decide for themselves whether their circumstances justify taking the risk of damaged, useless instruments in order to save the very small time involved in fitting batteries which have been properly stored out of the instruments.—I am, etc.,

B. R. SUGG,

Technical Director,
Longworth Scientific Instrument Co. Ltd.
Abingdon, Berks.

Senile Keratotic Patches and Topical Vitamin A

SIR,—Sir Douglas Mawson, towards the end of his epic sledge journey in Antarctica in 1912–13, found his skin to be peeling extensively; the skin of his soles even

came off as a thick layer, which could be bound on again as a reasonably comfortable dressing for the new tender skin that was exposed.

We have shown¹ that this shedding of the surface epithelium was almost certainly due to his having eaten an excess of vitamin A. This suggested to me the possibility that keratotic patches on the skin of old people might be due to an insufficient quantity of vitamin A getting through to the epithelial cells concerned. It also seemed possible that perhaps sufficient vitamin A to loosen the adherence of the squames to each other might be obtained by applying vitamin A ointment as a therapy.

I therefore applied a proprietary preparation of this type to a senile patch, near the junction of hair and face, that I had developed, my age being 91. I rubbed it vigorously each day into the discoloured patch, which gradually became reduced in size and practically disappeared (temporarily, I presume). This ointment is stated to contain 1,800 international units of vitamin A/g. It seems worth while for others also to try this simple treatment.—I am, etc.,

J. B. CLELAND.

Beaumont,
South Australia.

REFERENCE

- ¹ Cleland, Sir John, and Southcott, R. V., *Medical Journal of Australia*, 1969, **1**, 1337.

Urinary Symptoms in General Practice

SIR,—Apropos your leading article under the above heading (15 November, p. 381), I should like to draw attention to lower spinal arthritis as an exciting factor in urinary symptomatology, with or without infection in the same patient. It can cause spells (lasting weeks or months) of extreme urgency, frequency, and polyuria without pain, and can also be associated with severe abdominal pain—for example, dysmenorrhoea, in the absence of uterine or ovarian lesions or of any dis-

comfort directly referable to the bladder: all with sterile urine.—I am, etc.,

Storrington, Sussex. MARGARET EMSLIE.

Royal United Kingdom Beneficent Association

SIR,—I believe the work of the Royal United Kingdom Beneficent Association could help to solve some of the problems which doctors often meet in the course of their work. The association, which was founded in 1863, has, as its first purpose, the provision of lifelong annuities to professional people, or their dependants, who are living in straitened circumstances. These annuities, whose usual value is £144 with an income limit of £520 per annum, often have the effect of enabling the recipients to stay on in their own homes for as long as they are physically able to do so. At present over 4,000 of these annuities are being provided, and the association is ready to increase that number if suitable applicants can be found. They are available for men and women over the age of 40 who, owing to physical disability, cannot earn their own living, and over the age of 60 in women and 65 in men no evidence of infirmity has to be produced. When its annuitants are no longer able to live at home, RUKBA aims to find places for them in its own or other residential homes.

Though in 1968 some £480,000 was distributed by RUKBA, most doctors know little of its work. One of the aspects most appreciated by those whom it helps is the feeling that they are members of a family, and not of a publicized institution; but the committee fears that this lack of knowledge may mean that a large number of people eligible for, and in need of, the annuity are not aware that it is available to them.

If any doctors would like further information, I shall be pleased to provide it.—I am, etc.,

C. G. SCORER,
Medical Adviser,
Royal United Kingdom
Beneficent Association.

13 Bedford Street,
London W.C.2.

Representation of Hospital Junior Doctors

SIR,—In the recent correspondence on representation of hospital junior doctors (25 October, p. 239, and 1 November, p. 304) there has been more than a hint that the business of the Hospital Junior Staffs Group Council has been manipulated in some possibly dishonest way. As these rumours have achieved a wide circulation and a degree of credibility by repetition I feel bound to present some of the facts.

The debate on representation was taken out of order and at the end of the meeting on 9 October. The members of the Group Council knew of this decision at lunch time. The reason for taking an important debate of this type last is to give the new members of the committee a chance to find out what is going on and not to debate an important matter in isolation. The debate started at about 5 p.m. and finished about 6 p.m. A great deal of this time was taken up with devising rules for adjournment and recall, as the Group Council has no written constitution. The secretariat were most helpful, rules were devised and accepted, and the vote to adjourn passed with 29 members voting; the

maximum number present at any time was 33. At the meeting on 5 November I warned the Group Council that a two-thirds majority was required to rescind the adjournment motion in the light of the previous resolution. The motion did not attain the necessary majority, and I had no alternative but to rule as I did. Incidentally, the Secretary of the B.M.A. was there and not able to advise us on the constitutional position when asked to do so.

On 9 October the Group Council resolved to formally dissociate itself from the Junior Members Forum on the understanding that the chairman would discuss the continuation of the Forum with senior officers of the Association (29 November, p. 562). This I did when I met Dr. R. Gibson and Mr. Walpole Lewin. The reason for the Group Council's action was the repeated attempts by Dr. Gibson to use the Forum for representative functions for which it is not suitable and which threaten the position of the Group Council. I hope that hospital junior doctors, elected by their regions, will continue to attend the annual meetings of this