reported by Drs. K. L. STUART, G. T. M. CUMMINS, and W. A. CHIN (U.W.I.) confirmed the predictive value of bacteriuria as an index of subsequent clinical pyelonephritis and showed the higher incidence of prematurity and the hypertensive disorders of pregnancy in bacteriurics than in non-bacteriurics. An important study on renal function in infantile malnutrition by Dr. G. A. O. ALLEYNE (Jamaica) showed that there was a consistent reduction in glomerular filtration rate, an inability to excrete free water, and an impairment in the ability of the kidney to produce a concentrated urine. Improvement in these indicators of kidney function took place during recovery from severe protein-calorie malnutrition. Dr. J. S. GARROW (M.R.C. Tropical Metabolism Research Unit, Jamaica) presented results of measurement of total body potassium in infantile malnutrition by means of a scintillation counter. A reduction of up to 50% of the normal value of total body potassium was found in the oedematous kwashiorkor infant even if serum potassium levels were normal. Disappearance of clinical oedema was associated with a rapid increase of total body

potassium. Marasmic infants or non-oedematous malnourished infants showed a relatively smaller deficit of total body potassium.

Dr. P. CURZEN (U.W.I.) reported results of investigations of enzyme histochemistry on 92 placentae obtained from normal and abnormal pregnancies of different stages of gestation. The author suggested that a high concentration of alkaline phosphatase and glucose-6-phosphatase, together with a low concentration of acid phosphatase, constituted the histochemical indices of placental insufficiency. A paper by Dr. J. B. DAVIES of the Sandfly Research Unit, Jamaica, demonstrated that the emergence rates of three species of culicoides were closely related to the tidal amplitude and mean weekly tide levels, thus establishing that control of these insects could be brought about by water management methods. Dr. T. M. W. POON-KING (Trinidad) reported on an epidemic of acute glomerulonephritis which occurred recently in South Trinidad. Two hundred and ninety-seven patients were admitted to hospital, and children between the ages of 3 and 9 years were most frequently affected.

Three-quarters of all patients were East Indians and the incidence was considerably higher in rural than urban areas. Oedema was the presenting symptom in all cases. Whereas few patients gave a history of preceding sore throat, many had septic skin lesions one to four weeks before the onset of oedema. Group A beta haemolytic streptococci were isolated from the skin and throat of a representative sample of nephritic patients. Dr. D. A. GALE presented the findings of a retrospective study of anaphylactoid reactions occurring in Barbados. This survey showed that 92 reactions were reported by 42 doctors and the number of reactions appeared to be on the increase. Penicillin was the antigenic agent in 57% of cases, the second commonest cause being A.T.S. and other antisera (28% of cases). Five of these reactions were fatal. The author believed that few doctors practising in the area appear to be adequately prepared to deal with this medical emergency. He concluded with a discussion of current testing procedures to detect potential reactors, followed by an account of prophylactic measures, and methods of treatment of an anaphylactoid reaction.

Medicine To-day

It seems more than four months since I arrived at the home of long-suffering friends, with snow on my boots, to see the first programme on *Medicine To-day*. Yesterday, the warmth of a glorious May day, with the temperature touching 80 unfashionable Fahrenheit degrees, had cooled to a balmy evening when I arrived once more to view (B.B.C. 2, 13 May). It is a pleasure to report that the programme, like the weather, had substantially improved.

The bitty mock-magazine of January had given way to two speakers with time to develop their themes, and introduced by the familiar figure of Dr. Charles Fletcher. The main item covered the field of malnutrition due to malabsorption. Dr. Christopher Booth, physician to Hammersmith Hospital, delivered a lucid account with an eloquence and ease that belied the complexities of his subject. From basic physiology, through clinical medicine and surgery, we were led into the world of the biochemist without once becoming lost on the way, without being bogged down in a morass of figures, and,

most important of all, without even losing sight of the patient. This was masterly medicine superbly administered, and it held the attention of my non-medical hosts from beginning to end. No spoonful of sugar was required to help this medicine go down.

"People who have had a partial gastrectomy are among the worst nourished members of the community." Sixty per cent of them had steatorrhoea, 50% iron-deficiency anaemia, 20% vitamin-B₁₂ deficiency, and 3-15% osteomalacia. "Partial gastrectomy is the commonest cause of osteomalacia in this country to-day." It was not difficult to accept the idea of an annual check on all who have had a partial gastrectomy.

The diagnosis of adult coeliac disease was described and illustrated with some remarkable pictures. Specimens taken with the Crosby capsule showed a mucosa lacking the normal villi—"poisoned by the dietary toxin, gluten." No advertiser could have bettered the contrast after treatment, as the villi returned to flourish once more in a

gluten-free environment. We were promised, and even managed to enjoy, a tapeworm's eye view. A few years ago, when one of my own patients developed Addisonian pernicious anaemia after an operation for Crohn's disease, neither I nor the surgeon were aware of cause and effect, but apparently the poor girl had lost the only part of the small intestine (the terminal ileum) capable of absorbing vitamin B₁₂. If she was watching last night she will have appreciated Dr. Booth's plea for rational treatment based on intestinal physiology.

Dr. David Williams, dermatologist at King's College Hospital, gave a short talk in which he expertly outlined the treatment of various skin conditions that affect the feet. He emphasized that these are not all fungal in origin, but I wonder if he really meant that oral griseofulvin should be used in every case that is caused by fungi.

All in all, an interesting and provocative programme; but still on B.B.C. 2, which most doctors cannot receive, and at the late hour for imposing on friends of 11 p.m. Things are looking up. But are the doctors looking in?

GEORGE BIRDWOOD.

Use of Isotopes in Medicine

On 12 May the Radiochemical Centre at Amersham celebrated its 25th Anniversary with a demonstration of the developments which have taken place in the use of radioactive materials during the past five years. These involve the use of radioactive isotopes in industry, scientific research, and medicine.

Work at the Centre has been directed particularly towards the production of a wider range of products. While five years ago a

hundred different isotopes were available, the number is now a hundred and eighty. This has the effect of giving the user a wide range of choice for specific purposes. There are, for instance, now five isotopes of iodine, two of sodium, three of cobalt, and four of strontium. Of particular importance is the newer isotope technetium-99 m, which is coming into use in medical diagnosis with the technique of isotope scanning. It per-

mits the same examinations which can be made with iodine-131, but with only a small fraction of the radiation dose to the patient. This widening of the range of simple isotopes has been accompanied by a similar increase in diversity of labelled compounds. Carbon-14 is still the most important isotope for tracer experiments, with some four hundred compounds listed, but there has also been a great increase in the use of tritium for this purpose. There are about two hundred tritium-labelled compounds, compared with the forty which the Centre had available five years ago.