

servative management. Admittedly, you conclude your article with a reminder of the need for a controlled trial, but much of the conviction and finality of this message is unfortunately removed by your having preceded it with such an aggressive phrase as "striking success", which must surely have left the more permanent imprint on the mind of the uninvolved reader.

While there is little doubt about the value of cyclophosphamide in the steroid-dependent nephrotic child, its effect in other forms of glomerulonephritis is not proved and requires evaluation in controlled therapeutic trials. Meanwhile, it should only be used after very carefully weighing its known immediate toxicity and its uncertain long-term effects on immature gonads against the individual child's prognosis. The treatment is easy but it is the assessment of prognosis which may present the greater difficulty, even to skilled and experienced physicians.—I am, etc.,

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Haemorrhage Mimicking Intravascular Haemolysis

SIR,—I have seen two patients with a ruptured ectopic pregnancy mimicking intravascular haemolysis. The presentation and laboratory findings were similar in both cases and the second one only is briefly described.

She was a 28-year-old English woman who had a bloodstained vaginal discharge and mild hypogastric pain, which had started one week before her expected period and lasted for 23 days until admission. Seven days before admission she also had an episode of severe abdominal pain with sweating lasting a few hours. During the two weeks before admission, she had attended the V.D. Clinic and was treated as a possible case of salpingitis with tetracycline. Serological tests and cultures were negative. On her last visit to this clinic she was noted to be pale and tired and was referred for a blood count.

She was admitted as an emergency when her haemoglobin was found to be 7.4 g/100 ml with 9.2% reticulocytes and the plasma was noted to be brown with a strongly positive Schumm's test. Her urine had been dark for about a week. She was pale, but neither looked nor felt ill. Her pulse and blood pressure were normal and the abdomen soft and without tenderness. Investigations on admission were negative for G-6-PD deficiency, autoantibodies including Donath-Landsteiner antibody, paroxymal nocturnal haemoglobinuria, and Heinz bodies. Blood cultures yielded no growth; the white cells and platelets counts and the blood urea were normal. The urine showed excess urobilinogen and haemosiderin granules, demonstrated by Perl staining of the deposit. Serum lactic dehydrogenase was markedly raised at 1100 units, alanine transaminase raised to 60 units, and aspartate transaminase raised to 43 units.

As the history was reminiscent of the first case a gynaecologist's opinion was sought. He made a clinical diagnosis of ruptured ectopic pregnancy, which was confirmed at operation. A sample of the 750 ml of blood found in the peritoneal cavity had a P.C.V. of 80% and the serum was dark brown with a strong red tinge. It was

assumed that reabsorption into the circulation of this lysed old blood over 8 days or more was responsible for the heavy methaemalbuminaemia, haemosiderinuria, and the very high serum lactic dehydrogenase level. The patient made an uneventful recovery and the methaemalbuminaemia disappeared over the next four days.

I feel these cases are worth reporting as both were initially thought to have anaemia due to intravascular haemolysis rather than haemorrhage. Severe abdominal pain and shock can occur during episodes of acute haemolysis and some standard medical and haematological text books do not mention reabsorption of lysed blood as a cause of methaemalbuminaemia and haemosiderinuria. Cecil and Loeb¹ states that "its occurrence [methaemalbuminaemia] is pathognomonic for intravascular hemolysis even in the absence of free hemoglobin in the plasma or urine." Reference to methaemalbuminaemia following extravasation of large amounts of blood into epithelial-lined spaces was found in Cantarow and Trumper's *Clinical Biochemistry*² and it has been described following reabsorption of massive deep haematoma.—I am, etc.,

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- 1 Ham, T. H., in *Cecil and Loeb Textbook of Medicine*, ed. P. B. Beeson and W. McDermott, 12th edn., p. 1049. Philadelphia, Saunders, 1967.
- 2 Cantarow, A., and Trumper, M., *Clinical Biochemistry*, 6th edn., p. 214. Philadelphia, Saunders, 1962.

Diverticular Disease of the Colon

SIR,—In view of the extreme rarity of diverticular disease of the colon in Africans, as discussed by Mr. N. S. Painter and Mr. D. P. Burkitt in their article last week (22 May, p. 450), I should like to report a case of diverticulitis occurring in Malawi.

The patient, a Bantu woman of around 40 years of age, was sent to Zomba General Hospital in August 1970 from a rural dispensary with a history of severe lower abdominal pain of two days' duration. A tentative diagnosis of ruptured ectopic pregnancy had been made.

When I first saw her, she was thin, dehydrated and shocked with marked tenderness and guarding over the lower abdomen, absent bowel sounds, and tenderness in the pouch of Douglas. After resuscitating her with intravenous fluids and blood, laparotomy was performed.

The findings were of faecal peritonitis, with the loops of the intestine matted together and covered with a greenish exudate. Multiple diverticula were found on the large bowel, two of which on the transverse colon had perforated giving rise to the peritonitis. The appendix was normal. The perforations were closed, caecostomy performed, and a drain inserted, but, despite blood transfusion, intravenous fluids, and high doses of antibiotics, the patient died five days after operation.

This was the only case of diverticulitis I saw in two and a half years as a medical officer in Malawi. However, since the only routine examination carried out on patients with symptoms referable to the large bowel was microscopic examination of the stool and barium enemas were only rarely performed, it is possible that cases of diverticular

disease were missed. In addition, very few postmortems were carried out for other than medicolegal reasons and so, little information is available from that source.—I am, etc.,

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Token Therapy

SIR,—I was interested to read the article by Dr. I. M. Marks and others on "Operant Therapy for an Abnormal Personality" (20 March, p. 647).

We had a similar case of a hysterical psychopathic female aged 20, whose behaviour was characterized by impulsive, unpredictable, destructive outbursts against property or herself. All forms of medication and supportive treatment had been tried but her calm periods never lasted longer than a few days. Eventually we tried a system of giving her so many tokens for each half-day of good behaviour; a certain number of tokens thus earning her more freedom and a chance to return from the closed ward to the admission ward. Her behaviour improved considerably for some three months, until we got to the stage where we tried to find her suitable work. Unfortunately, the two jobs she tried failed to provide the right milieu for this patient and therapy was brought to a sudden end by her incarceration in prison, following an outburst of anti-social behaviour in the town.

Although the outcome in this case was not successful, there is no doubt in my mind that token therapy has an important part to play in treating this sort of case where immediate tangible rewards can satisfy such immature personalities.—I am, etc.,

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Silicone for Osteoarthritic Joints

SIR,—I was astonished by the high incidence of reactions to intra-articular silicone in the small series reported by Professor V. Wright and others (15 May, p. 370). This was not the experience of Corbett *et al.*¹ nor indeed my own.² A relevant factor may be that in both these studies the silicone was obtained from a different source and, incidentally, was of a different viscosity. No fewer than three out of the 20 patients in the present report had reaction to their silicone injections. This, I feel, throws suspicion on the material used and so on the results obtained.

As I have said previously,³ a lubricant is unlikely to be effective where there is gross bony incongruity such as in advanced osteoarthrosis, except where the disease is mainly patello-femoral, when it can help by floating the patella off the femoral condyles. The main indication for its use is in dry rheumatoid joints where a bony contour is often maintained.

In normal joints moving slowly under load viscosities can rise to 10,000 centipoise; in the presence of rough surfaces, logically, a much higher viscosity is needed. We are at present using a silicone of 100,000 centistoke viscosity and this seems to be acting more effectively and is also retained in the joints for a much longer period.

I am surprised by the observation that in