Adult Scurvy

SIR,—I should like to make a brief comment on a case of adult scurvy described by Dr. G. H. Jennings and Surgeon Lieutenant A. J. Glazebrock in the Journal of October 15 (p. 784), since I feel the impression given is slightly misleading. The report on the bone marrow quoted is that sent to the ward at the time of the patient's admission; since then I have had the opportunity of examining marrow films from a large number of cases of Addisonian pernicious anaemia. The primary erythroblasts in the case described are much more mature than those seen characteristically in pernicious anaemia. I would no longer say that the film was compatible with such a diagnosis. In fact it is now used for teaching purposes as an example of megalocytic anaemia where the marrow picture should have enabled us to state that the case was definitely not one of the Addisonian type.

I can only regret that my ignorance in the first place may have confused the issue.—I am, etc.,

London, W., Oct. 17.

JANET M. VAUGHAN.

Aperients and Sulphanilamide

SIR,—In your issue of June 25 (p. 1392) a letter from Dr. Harry Roberts appears concerning the administration of sulphanilamide with saline aperients. As it is generally believed that the concomitant administration of sulphur-containing purgative drugs, such as magnesium sulphate, with the drugs of the sulphamido group is not devoid of danger, I feel that the following case would be of particular interest as magnesium sulphate was given continuously with maximum doses of carboxy-sulphamidochrysoidine (rubiazol) over a period of ten days without any toxic manifestations occurring.

A boy of 8 years was admitted to Wimbledon Hospital on September 7, 1938, his mother having noticed discoloration of the urine and oedema of the face for four days.

On examination the child was found to have enlarged tonsils (he had suffered from an attack of tonsillitis three weeks previously); there was slight oedema of the face; and his blood pressure was 150/90. The physical signs in the chest were diffuse tubular breathing, rhonchi, and crepitations. Pathological findings were as follows: The urine was acid and contained 6 per cent. of albumin (Esbach), many pus cells and red cells, and casts. Culture gave a strong growth of B. coli and enterococci. A throat swab showed a mixed culture of Strep. viridans and Staph. aureus. The blood culture was sterile. The blood urea was 46 mg. per cent.

He was nursed on the balcony during the day-time, sitting up in bed. Fluids were restricted to 1½ pints of glucose and orangeade per day. An electric pad was applied to his loins and the following drugs were given: pot. cit., 20 grains four-hourly; mag. sulph., 1 drachm, mane; linetus sedativus, 1 drachm, nocte; mist, ammon, carb., 1 drachm three times daily. On the second night he was very restless and "chesty," and his temperature rose to 103.6° F. and his respirations to 40 a minute. At 10 p.m. he had a rigor. Two tablets of rubiazol were given at once and he was put on one tablet (3 grains) four-hourly. The next evening his temperature was 102° F., but his respiration rate rose to 60 a minute. Continuous nasal oxygen was given throughout the night. The following evening, although his temperature was still up to 103° F., he was very much better and respirations were quite easy-30 a minute. His temperature became normal within five days. The oedema of face had disappeared. Each day his urine was tested and the percentage of albumin steadily diminished, as also did the pus cells and red cells. The volume passed was about 13 ounces in twenty-four hours. All this time his skin was acting well and his bowels opened regularly each day with half a drachm of magnesium sulphate in the mornings.

On the tenth day there was a faint trace of albumin in the urine, but no red cells or pus cells. Culture was sterile. There was no oedema, and the signs in the chest were very slight. All drugs were stopped, including rubiazol. He was started on a light diet (excluding meat, eggs, and cheese) with as much fluids as he could drink. A good diuresis was produced. Fluid intake was measured against the urinary output for a few days—for example:

He was allowed up on the fifteenth day of his illness and made an uneventful recovery.

It is clear that in the above case a considerable amount of magnesium sulphate was administered at the same time as full doses of carboxy-sulphamido-chrysoidine, resulting in complete recovery without any signs of toxicity occurring at any time. Although the mechanism of the action of the drugs of the sulphamido group is not at present fully explained, it would appear that the action of the red compounds (such as carboxy-sulphamidochrysoidine) in the organism is quite different from the white substances (para-amino-benzenesulphonamide). It has previously been shown by Young, Snodgrass, and Anderson that the red substances are less toxic than the white, but so far as I am aware this is the first case reported where a sulphur-containing compound has been administered with a sulphanilamide product without any toxic signs being observed.

It would be interesting to hear of any similar cases, as clearly one case of this nature proves nothing in itself. I have to thank Dr. E. B. Rayner for permission to publish this report.—I am, etc.,

London, S.E.1, Oct. 7.

PHILIP GRIMALDI.

Overdosage of Prominal

S_{IR},—In view of the absence of clinical reports concerning prominal poisoning I have thought it advisable to record the following case. (Prominal is *N*-methylethylphenylmalonylurea.)

The patient, a married woman of 29 who had suffered from epilepsy since the age of 18, had been taking three or four prominal tablets a day for some years, the fits on this dosage occurring once or twice weekly. On September 5, 1938, after obtaining possession of a box containing fifty 3-grain tablets, she settled down in bed with a novel and swallowed the tablets one after the other until the box was emptied. Although it was certain that she had swallowed this number I was not called to see her until September 10, five days later; she was then in a semi-stuporous condition. When spoken to sharply in a loud voice she replied in a vague way; her breathing was very shallow, her colour was good, and her pulse and temperature normal. Her pupils were rather large and reacted slowly to light. This condition slowly disappeared, and by September 16—that is, eleven days after the ingestion of the drug-the patient was normal. Her relatives assured me that she had missed no meals, and that her hours of sleeping and waking had not been altered. In addition she had been given her usual aperient each night, and had been sufficiently conscious to be supported to the bathroom daily, although she had been unable to attend to her toilet. An interesting point in connexion with this case is that the patient developed a slight attack on the morning of the eleventh day, and that during that period she would have taken almost as many tablets as she consumed in the single dose. On the twelfth day she had two attacks; she then resumed her usual dose, and twenty-four days after recommencing the prominal she had not had an attack.

I have been unable to find a report of a similar case of overdosage with prominal, but it is of interest to compare this with the case of luminal poisoning reported by J. P. Stewart and W. Willcox (Lancet, 1934, 1, 502), in which recovery occurred after the ingestion of 100 grains of luminal, although the symptoms were much more severe than those displayed by my patient. The toxicity of prominal is stated by the makers to be 30 per cent. lower than that of luminal. This case illustrates very clearly the strong sedative effect without the hypnotic action.—I am, etc.,

Blackburn, Lancs, Oct. 9.

D. KELLEHER.

Palpation of the Trachea

SIR,—Although it is obvious that determination of the position of the trachea in the lower part of the neck only justifies a surmise as to the position of the upper mediastinum, more and more attention has been paid to this physical sign in recent years. Hence I make bold to describe the following method, which I have found very useful in eliciting the physical sign and in demonstrating it to students.

The observer's thumb is placed on the patient's neck as low down as possible between the sternal head of the right sterno-cleido-mastoid muscle and the trachea, while the fingers are placed on the belly of the clavicular head of the left sterno-cleido-mastoid just above the clavicle. An attempt is then made to grasp the trachea between the finger and thumb without displacing the structures of the neck. The same thing is then attempted on the other side, this time with the fingers on the trachea between it and the left sterno-cleido-mastoid and the thumb on the belly of the right sterno-cleido-mastoid. If, as is usual, the trachea lies in the midline, then it is impossible to grasp this organ without grossly displacing the structures of the neck by either grip, but the slightest displacement to either side brings the trachea under the belly of the sterno-cleido-mastoid on that side and allows the former to be easily felt by the grip described above.

-I am, etc.,

G. JOLY DIXON,

Medical Registrar, Charing Cross Hospital.

London, W.C.2, Oct. 6.

Treatment of Infections of the Hand

SIR.—I have read with interest Mr. Norman Lake's three articles on infections of the hand in your issues of October 1, October 8, and October 15, and must confess to some sense of disappointment as each succeeding instalment failed to reveal a rational treatment. Some reference was made to arm baths; I had hoped it would be a condemnatory reference, but it seems that soakage in aqueous solutions is still to be tolerated, with its sequelae of unhealthy, swollen, drainage-damming granulations; secondary infection; and subsequent stiffness.

No mention is made of the virtue of infrequent dressing on the Winnet-Orr principle: that is, after adequate incision a large quantity of vaseline is applied on gauze and the dressing left for five to seven days. With this treatment artificial drainage, which Mr. Lake rightly condemns, is unnecessary. The advantages of this method are numerous:

- *1. The dressing can be painlessly removed without disturbing healthy granulations.
- 2. Vaseline is, biologically speaking, non-nutrient to bacteria, as it cannot be broken down and does not form a suitable medium for their growth; it also forms a physical barrier to their entry; any bacteria in the wound can be dealt with by tissue defence.
- 3. Movement short of pain is always encouraged. This promotes a flow of discharge into the vaseline which prevents crust formation, and return to normal is accelerated. Rigid splints are unnecessary.

- 4. The hospitals whose out-patient departments favour the vaseline treatment of hand sepsis can show a *nil* return for such cases admitted to the wards; the reverse is the rule in "armbath" clinics.
 - 5. Economy of out-patient staff time and hospital material.
- 6. Patient returned to work with a useful hand in minimum
- 7. Re-education in physical treatment departments is hardly ever necessary.
 - 8. And greatest of all—an economy in pain.

-I am, etc.,

Longtown, Cumberland, Oct. 15.

R. RUTHERFORD.

Diagnosis of Whooping-cough

SIR,—In reply to Dr. A. Gordon Moore's letter (Journal, October 1, p. 722), in which he regrets that I was only able to devote a few lines to agglutination tests as a diagnostic aid in whooping-cough, may I enlarge on my findings.

Agglutinins were first demonstrated by Bordet and Gengou in 1907, but they were very guarded in their conclusions and stated that the power of agglutination in convalescent sera was very weak, having found that many sera giving a strong complement-fixation test had practically no agglutinating power; and they believed that the bacilli become so modified when grown on artificial medium that they are incapable of reacting with convalescent sera. In view of this all strains used in my tests were grown for twenty-four or forty-eight hours on Bordet medium containing 50 per cent. horse blood, which maintains the *Haemophilus pertussis* in its smooth phase.

An effort was made to demonstrate agglutinins in the blood of cases of whooping-cough from the second week onwards, but with one exception all were completely The one successful case agglutinated to a negative. titre of 1/128 in two hours' time in two series of dilutions, one of which was placed in a water-bath at 56° C. and the other in the incubator at 37°C. This serum was from a patient in the eighth week of illness, and the complement-fixation test was strongly positive. Various other sera giving positive complement-fixation tests were put up at the same time in duplicate, as above, using the same strain of bacillus, but results were completely negative. The dilution of organisms in all cases was approximately 2,000 million per c.cm. In all, fifty different sera were tested, most of which gave strongly positive complement-fixation tests, and as they all failed to show agglutination at any time during twenty-four hours the conclusion come to was that the agglutination test was unreliable and useless as a method of diagnosis. -I am, etc.,

Edinburgh, Oct. 10.

A. B. DONALD.

Tomography in the Vertical Position

SIR,—Drs. J. B. McDougall and J. H. Crawford, who in their paper on tomography (Journal, October 15, p. 782) were kind enough to refer to my work, stated that it is claimed (my italics) that by vertical tomography the upper limit of a pleural effusion or the line of a fluid level in a cavity is not obliterated. It would have been more correct to have said that by working in the vertical position fluid levels can unquestionably be shown whenever fluid is present. Such has been my experience in every case of this type that I have examined. Surely the limitation of the original apparatus devised was the only excuse for departing from the more usual practice of