

Hypoproteinaemia during Recovery from Anaemia

SIR,—At the commencement of his article on hypoproteinaemia during recovery from severe anaemia (Jan. 13, p. 45), Dr. Trevor Davies writes: "Generalized oedema due to diminution of the serum proteins is not a common complication of the treatment of anaemia . . ."; and at the beginning of his comment he writes: "The above case illustrates the importance during the treatment of severe anaemia of maintaining a diet rich in protein."

In 1942 I published an article on the prevalence of hypochromic anaemia in the adult population. It may be of interest that since that time I have treated many cases of hypochromic anaemia with haemoglobin between 50 and 65% of normal, but I have never seen oedema either before or during treatment. I have treated groups of cases with ascorbic acid, vitamin B complex (B₁, B₂, B₆), and vitamin A, but in no group did the administration of vitamin have any influence on the Hb%. However, one invariable result of the administration of ascorbic acid (200 mg. per day) was an immediate and progressive increase in the number of red cells, without any effect on the Hb%. Finally, in no case of hypochromic anaemia have I found any diminution in the serum albumin or serum globulin either before or during treatment.

It seems probable that the condition, which continues to be prevalent in young adults of both sexes, is due to deficient intake of iron, but the deficiency is probably due to the low consumption of meat, and not the low consumption of vegetables as used to be thought.—I am, etc.,

London, S.E.24

KENNETH MCFADYEAN.

Bilateral Tuberculous Pleural Effusion

SIR,—Major Peter Kerley¹ states that double effusions are rare in tuberculosis, and Prof. Bruce Perry,² in his very interesting Bradshaw Lecture on the aetiology of erythema nodosum, states that a bilateral effusion is "an unusual occurrence with tuberculous effusion." This does not mean that bilateral exudative pleural effusion is rarely tuberculous, but may easily be so interpreted unless a clear warning is given.

Our experience of bilateral tuberculous pleural effusion at Sidcup can only be very briefly summarized here, and probably merits more detailed analysis, as the alleged extremely serious prognostic significance of bilateral effusions³ has not been confirmed in this unit. Of a consecutive series of 601 notified cases of pleural effusion, 319 male and 282 female, 35 were bilateral, of which 17 were male and 18 female. With an incidence of nearly 6% it appears that even the statement that double effusions are rare in tuberculosis needs correcting.

In our series of 601 cases a history of erythema nodosum has been obtained only 15 times (2.5%), of which cases 10 were female and 5 male, with an age grouping between 15 and 29 years and a maximum incidence around 21 years. All these cases were strongly Mantoux-positive with a dilution of 1:10,000. In 6 cases there was an interval of about a year between the erythema nodosum and the onset of the pleural effusion.

A history of erythema nodosum is probably best elicited by asking every patient if he has had "rheumatism with red lumps on the legs" (it was a pleasure to read that in the San Joaquin Valley the people call erythema nodosum "the bumps"), as patients have so often been told by their doctors that they have had rheumatism. So much does the "rheumatic" aetiology stick that in 1944 a boy of 18 years was subjected to tonsillectomy a few weeks after an attack of erythema nodosum in spite of a skiagram showing a grossly enlarged right hilum; he then developed a right pleural effusion and subsequently bilateral pulmonary tuberculosis, with positive sputum.

A useful investigation in cases of doubtful aetiology is the antistreptolysin titre, which will invariably be high in streptococcal cases; this investigation can easily be performed, while intradermal streptococcal tests are not readily available.

One final point: the Scandinavian authors have clearly shown that erythema nodosum is usually an early manifestation of tuberculous infection. This, although true in the majority of cases, is not always true. Two of my own cases prove it.

1. A girl aged 17 had been treated at the age of 8 for tuberculous glands of neck, developed erythema nodosum 8 years later, and after a further 12 months a tuberculous ascites and right pleural effusion.

2. A boy aged 18 had a laparotomy in April, 1944, for tuberculous ascites, then developed a left pleural effusion in July; tuberculin patch test was then possible. In November a cold abscess presented above the pubis and was found to originate from the right sacro-iliac joint. He had two crops of typical erythema nodosum before being transferred to a special orthopaedic unit. A skiagram of the chest showed complete resolution of the pleural effusion and clear lung fields. Antistreptolysin titre of serum was 30.

I wish to thank Dr. R. L. Quilliam for placing at my disposal some of his case notes. I also thank Sir Allen Daley and Dr. Ellingworth for permission to publish the figures.—I am, etc.,

Queen Mary's Hospital, Sidcup, Kent.

E. MONTUSCHI.

REFERENCES

- 1 Kerley, P. (1943). *Brit. J. Radiol.*, **16**, 199.
- 2 Bruce Perry, C. (1944). *British Medical Journal*, **2**, 843.
- 3 Fernandez, H. P. (1944). *Tubercle*, **25**, 83.
- 4 Gordon, B. (1940). *J. Amer. med. Ass.*, **114**, 733.
- 5 Heaf, F. R. G., and Ellingworth, C. (1944). *Brit. J. Tuberc.*, **38**, 10.

Nursing and Tuberculosis

SIR,—After reading Dr. Esther Carling's letter (Jan. 13, p. 59) it occurred to me that a useful investigation would be a tour of hospitals by a mobile mass radiography unit, and the nursing personnel filmed, those with suspicious films to be followed up in the usual way. This would establish the incidence of pulmonary tuberculosis in nurses, and a comparison could be made: (a) between general hospitals and hospitals for tuberculosis; and (b) with the general population. Certainly many of the factors that cause a breakdown with pulmonary tuberculosis are present while a student nurse is being trained.

In the same issue of the *Journal* Dr. Grenville-Mathers draws attention to the frequent failure to investigate home contacts of cases of pulmonary tuberculosis. I agree, and would add that the nursing personnel of sanatoria are contacts as much at risk as home contacts, and therefore should be re-examined and x-rayed periodically.—I am, etc.,

R. WRIGHT,

Coventry.

Medical Officer, Sterling Metals Ltd.

A Treatment for Superficial Eye Infections

SIR,—Wartime conditions, mainly "black-out" and working in a confined atmosphere, have created an increase in superficial eye affections. These excessive conjunctival vessel dilatations are painful, leading to worry and apprehension both to the patient and to his fellow workers, and absence from work.

The use of a solution of 1% natural ephedrine hydrochloride is not frequent in eye-drops, but I have found it useful to bring about decongestion of the conjunctival vessels. To this ephedrine solution can be added a weak solution of silver vitellinate, and enough sodium chloride to make the drops practically equivalent to normal saline. It is difficult to avoid the formation of silver chloride, but if the conjunctival sacs are irrigated afterwards with warm water from an undine the possible onset of argyrosis is reduced to a minimum; if a stable solution of the three above-mentioned components can be obtained the risk of argyrosis should be nil.

With the combined action of a decongestive and an antiseptic the eye is irrigated and disinfected simultaneously, while the patient gets early relief and is enabled to return sooner to work.—I am, etc.,

London, W.1.

GRAYDON HUME.

Spinal Analgesia in Penetrating Abdominal Wounds

SIR,—I was much interested to read in your issue of Dec. 9, 1944 (p. 769), Major R. Binning's defence of a method of anaesthesia which I had hoped all careful and prudent surgeons and anaesthetists had long ago discarded. His assertion that it was the fact that a spinal anaesthetic was used in the case reported and not the Etherington-Wilson method of giving it which was the cause of death I most definitely refute. Although it is frequently taught that spinal anaesthesia is dangerous in cases of the acute abdomen, if properly used—as he can confirm any time he chooses to visit the Manchester School—it is perfectly safe. There is no doubt whatever that

the technique in the case quoted was the cause of death, as the analgesia had reached the lower cervical segments before respiratory paralysis occurred.—I am, etc.,

B.N.A.F.

THOMAS MOORE.

Parotitis from Unusual Duct Obstruction

SIR,—I read the account of an interesting case of parotitis by Dr. R. H. Trinick (Jan. 6, p. 13). The following case of acute simple parotitis due to an unusual type of duct obstruction may be worth recording.

On Jan. 9, 1944, the patient, a male aged 55, attended the dental surgery at the West Riding County Mental Hospital, near Huddersfield. There was a large hard swelling of the left cheek which was causing a considerable amount of pain. The condition had been present for a week and was gradually getting worse. The left sub-maxillary lymph glands were enlarged and tender, and there was some difficulty in opening the mouth.

Examination of the teeth of the left side revealed no advanced caries. There was no inflammatory condition of the gums. A small amount of pus was noticed on the inner aspect of the cheek opposite the maxillary first molar. This was swabbed away, when the opening of Stenson's duct was seen to be enlarged and surrounded by a small zone of inflammation. I then noticed what appeared to be a small foreign body lying in the opening of the duct. Attempts to swab this away failed, and, on grasping the "foreign body" with a pair of dressing tweezers, a grass stalk of length approximately 2½ in. was removed from the duct. This was followed by the discharge of a small quantity of thin, yellow, fetid pus.

Irrigation of the mouth with a mild antiseptic solution was advised to keep the enlarged duct opening free from debris. The patient was seen again one week later. The swelling and pain had disappeared and the inner aspect of the cheek was quite normal in appearance.

It is remarkable that a stalk of grass of length 2½ in. could become completely embedded in the parotid duct, which has an average length of approximately 2 in. My thanks are due to Dr. D. K. Bruce, medical superintendent of the hospital, for allowing me to report the case.—I am, etc.,

Huddersfield.

EDWARD I. FRIEND, B.Ch.D., L.D.S.

Artificial Insemination

SIR,—I am distressed at the unrealistic attitude shown by many of your correspondents on this subject (copies of the *Journal* reach me two months late). Surveys before the war by Cattell and by Fraser Roberts showed that our national failure to reproduce was greatest among those who were above the average in their hereditary endowment for intelligence. For the past eighteen months I have been watching and doing my best to minimize the tragic preferential destruction of some of our best types—young officers and N.C.O.s of front-line infantry battalions. A similar selectively high death rate of the fittest, most courageous, and most intelligent is occurring in the other Services.

Soon this country will face a desperate shortage of types capable of leadership and of producing intelligent answers to novel and difficult problems. Temporarily we may tide over the crisis by ensuring that every child who has outstanding genetic potential gets the environmental chance to develop this potential. But this is living on genetic capital, and the future of our country depends on the rapid provision of new children born with high genetic potential for intelligence and other desirable qualities.

First and foremost, married couples who are themselves above the average must plan the size of their families to be above replacement level and above the average of the community. If, as Mr. Churchill thinks, the average couple should aim at four children, then the above-average must plan for six to eight. Secondly, "artificial insemination" should prove a most useful supplementary method of producing children of high genetic potential, since the male donors can be specially chosen for their superlative genetic endowment; for qualities where inheritance is by multiple genetic factors, as for intelligence, such children will have an endowment midway between that of the mother and the exceptional donor.

Artificial insemination should be used chiefly in two types of case. (a) Where a woman is unable to find a husband—there will be a considerable surplus of women over men of reproductive age after the war. In particular there will be numbers of young widows of good type, who have only been

able to have one or two children before their husbands were killed. It is greatly in the national and their own interest that these women should have further children, at least up to the level of four, which would be replacing themselves and their dead husband. (b) In cases where the husband is sterile or should not father children for eugenic reasons, and both husband and wife prefer artificial insemination to the adoption of children. The use of a man's own sperms artificially to inseminate his wife when there is mechanical difficulty or relative infertility is clearly dangerous unless it is certain that the disability is not inheritable.

I am not competent to pronounce directly on the ethics of the matter; but ethical beliefs are subject to natural selection, according to the survival rate of those who hold them. A group or country which fails to avail itself of the possibilities of artificial insemination will have a correspondingly lower survival rate.—I am, etc.,

C. O. CARTER.

SIR,—The unimpassioned article on the practice of artificial insemination by Dr. Mary Barton, Mr. Kenneth Walker, and Dr. B. P. Wiesner (Jan. 13, p. 40) has come at a most timely moment. This is a straightforward procedure to be practised after due consideration on selected cases. One point, however, deserves further consideration—the registration of the birth of a child resulting from donor insemination (A.I.D.). In this matter I, too, have sought and quote eminent counsel's opinion: "In my view any husband or wife or medical practitioner who, knowing of the impotence or non-access of the husband, and knowing that the practice or operation of artificial insemination had been resorted to, wilfully gave information, etc., to the registrar that the husband was the father of the child conceived would commit an offence under the section. In the case of a title or inheritance being involved, questions of fraud or conspiracy to defraud the heir or other person entitled might well arise. In my opinion the only proper way to register the birth of a child conceived by artificial insemination is by leaving the columns for the name and other particulars relating to the father blank, whatever may be the subsequent embarrassment to the infant."

The advice, it will be seen, differs from that in the article, and, the possibility of disputed inheritance not being remote, it is the advice I give.—I am, etc.,

London, W.

REYNOLD H. BOYD.

Deaf Aids

SIR,—It has recently been announced in the press that a Parliamentary investigation is shortly to be made into the subject of deaf aids. Perhaps my experience of these will be of interest and value to your readers.

Suffering from progressive deafness (otosclerosis) I have used aids of various types for more than 20 years, and until the war found these to be of increasing efficiency, especially after the introduction of the valve type of aid. During this time I have only once been the victim of a deliberate "ramp."

At the present time I possess three "aids," all of which when in working order are extremely efficient, even in my advanced deafness. The great snags now are keeping them in working order and the very high cost of maintenance. Aids A and B are of the same make, A being purchased shortly before the war and B in 1942. At first both gave excellent service and cost little more than the cost of batteries, as the jelly-type accumulators are charged at home, and a pair lasted two years. Both batteries and accumulators have since increased in price and depreciated in value. Below is a summary of the cost for repair and maintenance of A and B for the years 1943 and 1944.

1943			1944		
	£	s. d.		£	s. d.
January	5	5 8	March	3	0 0
February	14	0	April	4	4 0
April	1	0 8	November	1	9 6
May	8	0	December	8	15 1
June	16	0			
November	1	7 6			
	£9	11 10	1943	9	11 10
			Total	£27	0 5

Registered postage of instruments has been a heavy charge of which I have no record, nor have I any record of the cost of H.T. batteries, which last about 6 weeks and cost 6s. each