Puerperal Fever and Streptococci

Q.—*It has usually been supposed that a case of scarlet fever in a household constitutes a danger to a woman who is about to be or has been confined in that household, because of the danger of puerperal fever. Is there any evidence that the causative haemolytic streptococcus in puerperal fever is in fact one of the types causing scarlet fever? It has been suggested that the response to sulphanilamide treatment in puerperal fever and the lack of response to such treatment in scarlet fever indicates a difference in the causative organism.*

A.—There is no doubt that any haemolytic streptococcus causing scarlet fever or streptococcal tonsillitis is capable, given the opportunity, of producing infection in the genital tract of a parturient woman. The common scarlatinal strains—Griffith's Types 1, 2, 3, and 4—have all been isolated from cases of puerperal infection, and, of course, some of the affected patients develop scarlatinal rashes. Therefore, when a woman acquires a streptococcal puerperal infection, inquiry should be made about any sore throats in the household, and all family contacts as well as the attendant midwife or doctor should have nose and throat swabs examined for haemolytic streptococci.

The failure of scarlet fever to respond to sulphonamide therapy is due to the fact that it is essentially a toxaemia accompanying a local throat infection, whereas puerperal sepsis is an invasive infection of the uterus by the haemolytic streptococcus, and this type of streptococcal infection (compare, for example, erysipelas) is particularly amenable to treatment with sulphanilamide.

Vaccination and Encephalitis

Q.—*Is there any danger in revaccinating young adults? Was there not a scare some years ago when several cases of encephalitis followed revaccination? Is this danger great? How can it be avoided?*

A.—Encephalitis is a very rare complication of vaccinia. The Committee on Vaccination (1928) reported an incidence in England of 1 : 48,000, and in Glasgow during 1942, when about half a million persons were vaccinated, the incidence was approximately 1: 70,000. It occurs almost entirely after *primary* vaccination, although 1 of the 7 Glasgow cases recorded by Anderson and MacKenzie (*Lancet*, 1942, **2**, 667) was a woman aged 41 who had been successfully vaccinated in infancy. Children over 5 and young adults are the age groups principally affected. There is no evidence that the encephalitis is associated with any special batch or preparation of lymph. Its greater frequency in England and Holland from 1923 to 1928 suggests that there may be a certain epidemicity in its occurrence. No conclusion has been reached as to whether the encephalitis is caused by the original virus—it follows other virus infections, particularly measles and mumps—or is due to the activation of a latent virus. Symptoms, varying from severe headache and drowsiness to deep coma, usually develop within 7 to 14 days after vaccination, and recovery, when it occurs, seems to be complete without sequels. Convalescent serum or antivaccinal horse serum may be used for the treatment of severe infections. Avoidance of the complication can best be effected by avoiding primary vaccination in school-children and adolescents. If this is impossible, a single linear insertion instead of multiple insertions should be carried out in such cases.

Atrophic Rhinitis

Q.—*A man of about 40 has had atrophic rhinitis for the past 20 years. I would be grateful for suggestions regarding treatment.*

A.—The most satisfactory local application is glycerin containing 25% of glucose. Benians showed that the organism associated with atrophic rhinitis does not grow in carbohydrate, which encourages the growth of the harmless *Staphylococcus albus*. This answers well when applied in practice, but crusts should be removed.

Trichomonas vaginalis

Q.—*Is infection by Trichomonas vaginalis becoming more common? How is it usually acquired? Is it limited to the vagina in females? Are male subjects liable to infection? How is it recognized? What is the best treatment?*

A.—There is no doubt that infestation by *Trichomonas vaginalis* is either becoming much more common or is being diagnosed more frequently. It seems probable that gynaecologists and venereologists are on the lookout for it much more nowadays than formerly. It is not known how it is acquired, but some regard it as venereal in origin. Apparently it is often present in the normal vagina, but gives rise to symptoms mainly when the *p*H is about 6 (normal 4–5). It is usually limited to the vagina in females, but may affect other parts of the urogenital tract, especially the urethra. Males are liable to infestation, but the condition is either not common or rarely gives rise to symptoms.

Lister and Lees found *Trichomonas vaginalis* in 4% of 400 consecutive cases (excluding syphilis) attending a V.D. out-patient department and in 16% of 105 cases of diseases of the genito-urinary system (excluding gonorrhoea). The diagnosis depends on demonstration of the organism. This is done by means of microscopical examination of: (*a*) moist films, preferably with the dark-ground microscope; (*b*) cultures; (*c*) films stained by Leishman's method. The first is probably the most satisfactory method for anyone but an expert.

Treatment consists in producing conditions unsuitable for the growth of the organism. In the male alkalinization of the urine by means of sodium bicarbonate by mouth often suffices, but in females various other methods are usually required. These include silver picrate in the form of powder for insufflation and pessaries; tablets of pentavalent arsenic for insertion in the vagina, combined with alkaline douches, or "negatol" in the strength of 2½% for douches and 100% for painting.

Eczema in a Child

Q.—*What treatment can be given either locally or generally to a child of 2½ years suffering from eczema? The lesions are present on the flexor aspect of both legs (in popliteal space), and also on the flexor aspect of elbows and wrists. Lesions are areas of redness and at times covered with scales, at present dry. Various ointments have been tried without any success. The child is well fed, looks well, and has no other defects.*

A.—The variety of eczema described is met with in children of an allergic disposition. General treatment recognizes their highly strung make-up and aims at a placid environment. Cod-liver oil may be given with advantage, and in many cases residence by the sea, and, in suitable weather, sea bathing, are beneficial. A 6% crude coal-tar paste is usually well tolerated, but should be employed only for a limited time. In view of the nervous make-up, attempts at desensitization are best avoided.

LETTERS, NOTES, ETC.

Thumb-sucking

Mr. W. STUART THOMSON, L.D.S., L.R.C.P.Ed. (Edinburgh), writes: With reference to the treatment suggested for the habit of thumb-sucking in your issue of Feb. 19 (p. 277), I should like to criticize very strongly the advice that the child be given a sweet to chew before going to sleep. I quite appreciate that our knowledge of the cause of dental caries is incomplete. Nevertheless, I believe that the large majority of dental surgeons who have studied this subject are agreed that the principal activating cause (or even sole activating cause) of dental caries is the lodgment of fermentable carbohydrate around the teeth. The very worst possible time for carbohydrate to be lodged around the teeth is when the subject is asleep and Nature's cleansing mechanism is at a minimum. Need I say more except to admit that I regret I am unable to offer a suitable substitute for the bedtime sweet?

Treatment of Sciatica

Dr. E. BRAUER writes from Spennymoor, Co. Durham: With great interest I have read Sir Arthur Hurst's article on the treatment of sciatica. To the measures enumerated, however, I would like to add one which I have employed with a very high degree of success indeed. It is that of vitamin B_1 injections. I have given vitamin B_1 in all cases of what I diagnosed as neuritis—facial, intercostal, etc.—and since I regarded sciatica, correctly or not, as neuritis I have used it for this condition as well. I have given it near or far away from the painful region, in the arm or leg, and have nearly always seen good results. Such results, I think, are more than simply due to faith in the treatment; owing to very poor facilities in this area for physical therapy, such as radiant heat, etc., I have not combined this treatment with any of these measures, so that the results cannot be attributed to them. Nor did I make the patient usually rest in bed, except in very severe cases and then only for 2 to 3 days. The results were very rapid, and the patients were fit for work within a fortnight to 4 weeks from the onset of the sciatica. I believe that all cases of what I might call idiopathic sciatica respond to vitamin B_1 therapy; those which showed no improvement at all I regarded as due to causes mentioned by Sir Arthur Hurst, such as prolapse of the nucleus pulposus, etc. I must mention that I find vitamin B_1 in the treatment of neuritis only effective when given parenterally. If given by the mouth the active antineuritic principle seems to be very much diminished if not almost lost in the alimentary canal. To obtain quicker results I have recently used the concentrated ampoules of 25 mg. per c.cm., giving 3 to 6 injections daily or on alternate days.

Infectious Jaundice: A Correction

Dr. A. M. MCFARLAN writes: I find that in your issue of April 1 your report of the discussion on the aetiology of infectious jaundice quotes me as having said: "The laboratory studies included various examinations which excluded the possibility that it was an outbreak of virus disease." This is of course nonsense, and I can only suppose that your reporter misheard what I said about examinations excluding Weil's disease and common bacteriological infections of respiratory or alimentary tracts.