cause of the paralysis this patient would still be wearing the tracheotomy tube, and perhaps would require it for many years to come. In spite of the great admiration that I have for my late teacher Lermoyez, and many of his school, I am still of the opinion that abductor paralysis of the larynx is not always due to syphilis.

It is needless to consider the syndrome of the posterior jugular foramen, or the more complex syndrome of the associated laryngeal paralysis, for the movements of the soft palate, tongue, shoulder and sternocloidomastoid muscles were normal. We can eliminate toxic neuritis, because the patient lived an out-door life, took neither alcohol nor drugs, and smoked only moderately. Arthritis of the crico-arytenoid joints was excluded for the reason that on my first examination there was no manifestation of an acute laryngitis, and one could hardly imagine such a condition developing in a chronic manner.

As a last resort, we have then to consider infective neuritis of the recurrent nerves. If we review the history of this case, we see that before the 18th of September, the health of the patient was excellent. However, on this date, he was seized with a severe attack of influenza, and two weeks later, a slight difficulty in breathing began to appear. On the 12th of October, a recurrence of the influenza so aggravated the laryngeal trouble that a tracheotomy had to be performed on the 16th of November. On the 21st of January, the tracheotomy tube was removed. Since then, respiration had been good. After excluding all other possible causes of this condition, one is driven to conclude that this paralysis of the abductors of the glottis resulted from an infective neuritis of the recurrent laryngeal nerves of influenzal origin. Further, we know that cases of infective neuritis of the recurrent nerves are met with from time to time, an example of which I published in 1929. This was a case of a young man with a negative Wassermann test, who suffered from a paralysis of the posterior crico-arytenoid muscles secondary to typhoid fever. At the beginning of July, bilateral abduction was slightly more pronounced, and adduction was normal. The voice had been clear for two months previously, and breathing was perfectly free, even during moderate exertion.

To sum up, I would say that the paralysis of the laryngeal abductors in my patient was due to an infective neuritis of the laryngeal nerves, following an attack of influenza. In conclusion, may I say that after an extensive review of the bibliography this case seems to be the first of its kind reported in medical literature.

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TRANSMISSION OF MALARIA BY BLOOD TRANSFUSION*

BY FRED T. CADHAM, M.D.,

Winnipeg

In 1919 Gubb[1] reported a case of the accidental transference of the malarial parasite from a recipient to a donor in the course of blood transfusion. Subsequently, several reports have appeared describing the accidental transference of malaria from the donor to the recipient during transfusion. Stein[2] describes a case in which two acute attacks of malaria developed following two separate transfusions from the same donor. Transmission of malaria from a donor who had never known a malarial infection was reported by Oehlecher.[3] Decourt[4] describes transmission from a donor who believed himself to be free of malaria for nine years, and Jankelson[5] relates the development of malaria in a child given a transfusion from its father who had contracted malaria some forty years previously.

Malaria is uncommon in Canada and extremely rare in the Prairie Provinces. Although the

* From the Department of Bacteriology and Immunology, University of Manitoba Medical School.

anopheles mosquito on a few occasions has been noted in Manitoba no report exists of a case of the disease arising within the province. Mosquitoes do not prevail in Manitoba in the winter. The case about to be described occurred in January and for a time the nature of the condition from which the patient suffered was not suspected.

CASE REPORT

E.D., a girl, aged 13 years, was admitted to hospital in November, 1934, under the care of Dr. Andrew McKinnon. The complaint was deformity of the spine, said to have been caused by a severe fall which occurred some three years previously, but which probably was the result of an attack of poliomyelitis. At that time the injury had been treated by the application of a plaster jacket. Aside from the deformity of the spine the patient appeared to be in normal health. The previous history and physical findings disclosed no evidence of any other pathological condition.

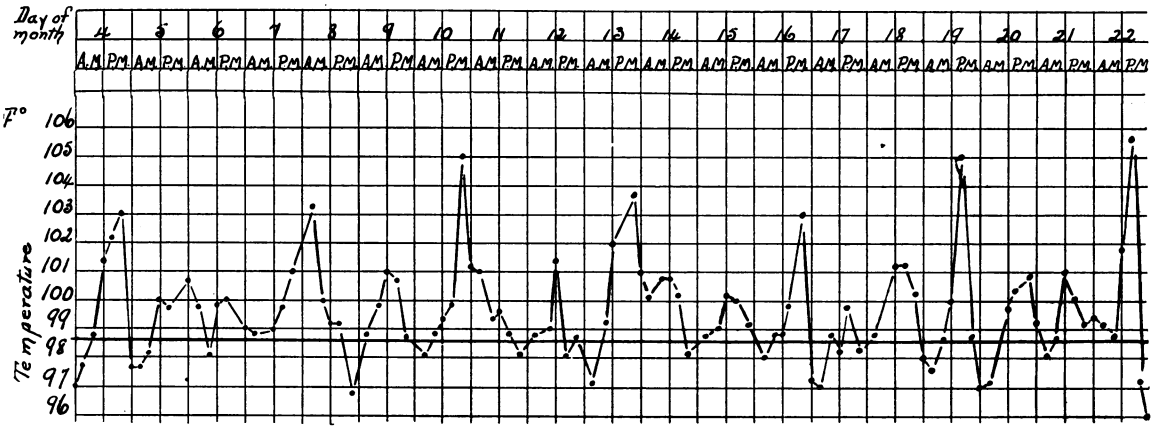

Chart.—The temperature curve seven weeks after transfusion, indicative of quartan malaria. Temperatures were taken for each day at the hours of 4, 8, and 12 a.m. and p.m.

On December 10th, following some correction of the deformity with turnbuckle jackets, multiple bone grafts from the left tibia were placed in a prepared bed from the 2nd to 7th dorsal vertebræ. Immediately after the operation an emergency transfusion was considered necessary. The father acted as donor; 500 c.c. of blood were given.

Three weeks later the patient developed an intermittent fever associated with chills and sweats. A careful examination failed to disclose the reason for these symptoms. The wound appeared healthy, and fusion of the graft to the spine was progressing normally. Tuberculosis was suspected, but the Mantoux test and skiagrams of the chest were negative. Blood cultures were negative. A progressive anæmia developed, the hæmoglobin fell to 52 per cent and the erythrocytes to 3,200,000. At the time of these examinations of the blood the malaria parasite was not found.

The symptoms continued for five weeks, when finally malaria was suspected. Blood smears were made and malarial plasmodia in all stages of the asexual cycle were demonstrated. Quinine was administered and the patient rapidly recovered.

The history revealed that five years previously the family had immigrated to this country from Czecho-Slovakia. The father who had acted as the donor for the transfusion had been a circus performer and had travelled extensively in Greece, Egypt and Italy and other countries where malaria is endemic. He also stated that he had been quarantined with patients suffering from malaria, but he himself did not remember suffering from an attack. Examination of his blood disclosed the presence of the *Plasmodium malariæ*.

COMMENT

Today blood transfusion is frequently, one might say, extensively, employed as a therapeutic measure. Moreover, for the prevention and in the treatment of certain diseases such as measles and poliomyelitis human blood or blood serum is frequently transfused or inoculated. Accidental transmission of disease during these procedures may occur. Several reports have been published describing the transfer of syphilis through transfusion; as a rule this latter hazard

is controlled, in part, by a preliminary Wassermann reaction.

On occasion, as in the case here reported, the necessity for transfusion is urgent. Under these circumstances sufficient time may not be available to examine the donor and also to obtain a history in the endeavour to eliminate the possible hazard of the transference of disease.

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ICHTHYOSIS

BY L. M. MULLEN, M.D.,

Cardston, Alta.

Ichthyosis is stated to be a hereditary congenital disease. Although congenital, it does not often manifest itself before the first or second year of life. If present in fetal life to a severe degree the child is usually stillborn or dies a few days after birth.[1, 2]

The disease is due to a developmental and nutritional defect of the skin. Histological examination in advanced cases shows the vessels dilated, the cutis thickened, and the connective tissue condensed into bands; the hair follicles are lengthened and contain lanugo; the glands are dilated and assume a cystic form; the subcutaneous fat is diminished. One case has been reported in which both sweat and sebaceous glands were absent.[2] The disease tends to be worse in winter than in summer. The prognosis as to cure is unfavourable.

A case interesting in itself and in respect to its family history, notably the siblings, has been under my care recently.

Baby S.K., male, born on June 28, 1935. Weight five pounds. Delivery by version and extraction because of lateral placenta prævia.

As soon as the baby had been bathed it was apparent that the skin was distinctly abnormal. The best description is to compare it to cellophane. The second day after birth the skin became drier, and cracks were evident, leaving raw fissures. By the fourth day large dry flakes of skin were coming off, leaving similar dry skin underneath, which a few days later would come off in turn. This continued throughout the life of the child.

The baby nursed fairly well from the beginning, but despite this did not show the usual growth or development. At six weeks his weight was five pounds, one ounce; at eleven weeks six pounds. The bowels and kidneys functioned normally. The baby was quieter than average, sleeping much and crying little. Death occurred with no forewarning symptoms on September 26, 1935.

The treatment consisted of daily oiling, after bathing, with sterile olive oil. Cod liver oil was given internally from the beginning. Raw surfaces or fissures were practically absent after the first month and no infection developed.

The pathological report on a piece of skin taken after death was: "Section of skin. There is a very thick layer of keratinized material on the surface but no other marked abnormality. Hyperkeratosis-skin."

Family history.—Mother and father apparently normal; their Wassermann tests were negative. One sister of the father is said to have a "delicate skin".

The first child of this union was a male born in December, 1928, and was apparently normal. This child was found dead in bed one morning at the age of six months.

The second child (a female) is now five years old and normal. The third child (a male), born in June, 1932, had a large congenital umbilical hernia and a skin condition the same as that of the last baby. Death occurred in one month. The fourth child (a female) is now almost two and is normal. The fifth child is that described in detail above.

Out of 5 children 2 females are alive and normal; 3 males are dead, and 2 of these showed severe ichthyosis. One also had another developmental anomaly in the form of a congenital hernia.

In the literature are reported cases of ichthyosis related to idiocy in seven families.[3] I do not find it mentioned in relation to other congenital anomalies, nor do I find any mention of a predilection for the male sex as it appears to have had in this instance.

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