



Temperature chart, case of D. B. at the commencement of treatment, showing the rise of temperature which followed the administration of a quarter of a lobe of fresh sheep's thyroid on March 27th, the maintenance of a relatively high temperature (as compared with the temperature of 95° to 96° before treatment) for 11 days, a decline, and a second rise of temperature after the administration of one-eighth of a lobe on April 13th.

curves. Also the open fontanelles, barrel-shaped chest, and protuberant abdomen, delayed dentition, and lateness in walking and talking. In the boy, D. B., there is decided thickening of the cranial bones along their edges, some of the sutures feeling like ridges. The absence of perspiration in sporadic cretinism is very constant. However, the boy D. B., since thyroid treatment was commenced, sweats remarkably copiously when asleep, especially about the head and neck.

Table of Measurements.

Date.	Height	Weight	Circumference round Navel.	Circumference round Mammæ.	Circumference round Calf.
1891.	Ins.	lbs.	Ins.	Ins.	Ins.
March ...	33	32½	—	—	—
August ...	34	35	—	—	—
1893.					
March ...	34½	40	22	21½	7¼
April ...	—	38	20	21	—
May ...	—	37½	19	20¾	—
June ...	—	37½	19	21	7½
August ...	37	43	22½	21½	8
September ...	—	43½	22	21½	8½
October ...	—	40	21	21½	8
November ...	—	38½	—	21½	—
1894.					
January ...	39	41½	22	22	8
February ...	—	—	22½	22	8

Head Measurements.

Circumference 21 ins. ... Above ears and over occipital tuberosity.
 Transverse (a) 13 ins., (b) 4 ins. ... (a) Tape measure from ear to ear over vertex. (b) Calliper measure from ear to ear over vertex.
 Longitudinal (a) 13 ins., (b) 7½ ins. ... (a) Tape measure from nasal notch to occipital tuberosity. (b) Calliper measure from nasal notch to occipital tuberosity.
 Width of forehead 4¼ ins. ... Between external angular processes of frontal.

In investigating the etiology of sporadic cretinism, it is striking how prominently "maternal depression and worry during pregnancy" seem to stand out among the alleged causes. In the case of both D. B. and his brother, the mother (a neurotic woman) alleges abnormal depression while pregnant with each of them (and not during the pregnancies

of the other normal children). In the case of another sporadic cretin in the Royal Albert Asylum at present, the most prominent cause to be found in the family history is unusual and great worry and depression on the part of the mother during her pregnancy with the patient (owing to money difficulties), all her other children being remarkably fine specimens, as is she herself and her husband. May it not be that the atrophic condition of the thyroid gland, which exists in sporadic cretinism, is brought about by a numerous class of causes, all of which tend to produce slow impairment of nutrition in the fetus?

Among the more prominent of these causes we might expect to find maternal depression and worry, or a lowered vitality in the parents produced by bad air or food, cold damp houses, or insufficient sunlight and want of cleanliness.

In the family histories of the patients it is remarkable that goitre, consanguinity, insanity, intemperance, phthisis, or syphilis seldom appear to be present.

SPORADIC CRETINISM TREATED BY ADMINISTRATION OF THE THYROID GLAND.

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G. B., whose case, with that of his brother D., was reported in the BRITISH MEDICAL JOURNAL in 1891, has now been under treatment by the administration of the thyroid gland for nearly a year, and the following brief notes respecting his progress and present condition may prove of interest.

Upon his admission for the second time into the Clinical Hospital in April, 1893, it was found that he had practically remained unchanged during the interval which had elapsed since his description was published in the JOURNAL.¹ Although he was two years older (14 years), the account then given still represented his condition and appearance with considerable accuracy. He had only grown three-quarters of an inch in the time, and therefore measured 33 inches in height, while his weight had but increased from 34 to 36 lbs. He had deteriorated, however, in health; he looked paler and more sickly than before; the lateral curvature pre-

¹ BRITISH MEDICAL JOURNAL, March 2nd, 1891.

viously observed had grown worse, and I learnt that he had been subject to attacks of bronchitis during the winter months. As regards his mental condition no improvement was observed. His expression was as dull as before, he used the same childish words, his vocabulary not appearing to have increased, and his voice was as guttural as ever.

For a week after admission he was merely kept under observation, and his temperature was regularly taken. This was found to be mostly subnormal. The treatment was then commenced by the administration of 36 grains of raw thyroid gland. The temperature rose slowly until, at the end of twenty-four hours after the dose, it stood at 102.4° , and for the next four days it fluctuated between 100° in the morning, and 102° at night. In addition to his feverishness he fell off his food, vomited once, was restless at night, heavy and morose during the day. The temperature then fell to normal. In these four days he lost 2 lbs. in weight. He subsequently took four similar doses of the raw thyroid at intervals of several days, but after none of these later administrations was the effect anything like that of the first, the highest temperature being about 100° . He continued, however, to lose flesh, though more slowly than before, and, after having taken four doses of the gland, he weighed 32 lbs.

On May 17th he began to take daily two of the thyroid tabloids of 5 grains each manufactured by Messrs. Burroughs and Wellcome, and since then this dose has been gradually increased until at the present time he is taking five tabloids daily. The treatment has been followed by a manifest improvement, both physical and mental, and this result has been obtained without any injurious effects being shown. The temperature has rarely exceeded 100° ; for the last month it has been usually about 99° .

To enable the reader to glance shortly over the symptoms of his progress as they were observed I will give extracts from the notes taken at the bedside.

May 11th. His hands are moist, his tongue is not so prominent, his face is less puffy, and his complexion is losing its earthy hue.

May 29th. His lips are thinner, the lower lip especially; the tongue seems narrower, and he often has his mouth closed. He is much more lively—in fact, he can hardly be kept covered by the bedclothes, although efforts are constantly being made to keep him quiet.

June 11th. He has gained an inch in height, and has lost $5\frac{1}{2}$ lbs. in weight. His abdomen is flatter than it was.

July 4th. He was heard telling the patient in the adjoining bed to "lie down," but his voice is still guttural.

On July 17th he was sent home for a time, his parents being instructed to give him two thyroid tabloids daily.

On November 1st he was readmitted, suffering considerably from bronchitis. He measured 35 inches in height and weighed $31\frac{3}{4}$ lbs. He continued to take two tabloids as before, and an estimation of the amount of urea passed by him was commenced. In November the daily average was found to be 182 grains, in December 208 grains, in January 180 grains, in February 165 grains, and in March, to the time of writing, 175 grains. On November 9th the number of tabloids given daily was increased to three, on the 24th to four, and on February 19th to five. These doses, as I have already said, have not caused him the slightest inconvenience.

The bronchitis has persisted more or less throughout the winter, but has lately improved. He has now fourteen permanent teeth, together with one or two old stumps of his milk teeth. Some of the first set have been extracted during his stay in the hospital. An attempt has been made to improve the great distortion of the spine by daily suspensions, persevered with for three months, but without perceptible improvement, and a plaster-of-paris jacket has been substituted recently with the same object.

His height is now 37 inches, and his weight $35\frac{1}{4}$ lbs. He has mobile features, and looks a pleasant and intelligent little boy, bearing, however, traces of illness and the resulting delicacy of constitution. His rather large mouth is the only feature reminiscent of his previous state so far as his face is concerned. He understands readily what is said to him, but, as we might expect, his command of language is not commensurate with his improvement in other directions.

Summing up shortly the effects of the thyroid gland in this case, we have, first, an extraordinary development of all parts

of the body, with a concomitant increase of metabolism, as shown by the amount of urea excreted and by the range of temperature. Of this development the rate of growth in stature is a very noticeable feature. To grow four inches in less than a year would be remarkable even in a healthy boy of 14; but in a cretin—and one who to our knowledge only grew three-quarters of an inch during the previous two years—it affords very strong evidence as to the potent character of the remedy. Secondly, we have the establishment of the normal functions of the skin and presumably of all the other excretory organs of the body. Thirdly, there are the changes in the brain and nervous system to be mentioned. We are justified, in my opinion, in believing these changes to have been almost as great as in the case of the body, and in concluding that language more or less perfect will come to the patient in due time. Just before the treatment began the condition of his brain was comparable to that of an infant of two years or so. Since then the development of the cerebral functions may be supposed to have been proceeding in much the same ratio as that of the body, so that practically he is now to be considered on a par mentally with a child about three years old, and we cannot expect that his thoughts and speech will improve faster than they would in a child of that age. On the contrary, the long sleep his brain has experienced may quite possibly prevent him ever being more than backward in intelligence. It still remains, however, to be seen what the effect of education may be. Time alone will decide what kind of a man he will make.

A CASE OF UNIVERSAL DERMATITIS: PROBABLY A RARE VARIETY OF MYCOSIS FUNGOIDES.

[WITH CHROMO-LITHOGRAPH.]

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THE following case appears to me to be worthy of record on account of its rarity, and still more on account of the pathological problems which it opens up as to the causation of the process which gave rise to lesions of the skin so obstinate and so widespread, and as to the possible relation between long-continued inflammatory action and the development of malignancy.

A. P., a clerk, aged 45, was admitted into St. Mary's Hospital under my care on December 29th, 1892. There was nothing of any etiological importance in his family history, and his own health, except as regards the cutaneous affection for which he sought advice, was in all respects excellent. The first appearance of his skin disease was referred by him to the summer of 1872, when he noticed a red patch on the back of his right leg; it measured about two inches in diameter, and was somewhat raised, dry, and irritable. On this patch after a time a boil developed; this was "lanced" and the irritation was in some measure relieved. In the following spring similar patches appeared on the backs of both legs, and the palms and fingers of both hands were covered with vesicles, which discharged for about a fortnight. The patient was treated for eczema, and a complete cure seemed to be effected. Later in the same year (1873) he proceeded to India; on his arrival in that country the eruption broke out again in the legs and spread down to the ankles; the hands also were attacked in the same way. He said the discharge was perfectly clear. This state of things continued until the patient returned to England in 1874, when the hands got well; the legs, however, continued to be troublesome. After a time the disease developed on the arms, the elbows being the parts first attacked. In the spring of 1875 the dermatitis assumed a more intense character, and spread more widely; there was much swelling of the legs, and exudation was abundant. At this time the patient consulted a London physician, who treated the case as a severe form of eczema, with the result that the eruption again completely disappeared.

In 1875 the patient returned to India, when the hands were immediately attacked, and in a short time the disease also recurred in the legs, which gradually became as bad as before, although the same treatment which had proved successful in London was employed. This state of things continued, with occasional fluctuations in the intensity of the process, for several years. The patient was treated by several different practitioners in India, but without any benefit. During all these years the lesions were confined to the legs, arms, and hands. The course of events might be described as a continued series of eruptions, appearing in the parts referred to, and breaking out in one place as they died away in another. The lesions were eczematoid in type, and consisted of crops of vesicles on an erythematous base, causing great itching.

In 1884 the patient returned to England for a holiday, and then for the first time he noticed a change in the character of the eruption. The dermatitis became more permanent in the parts already affected, and fresh lesions appeared on the outer aspects of the thighs in the form of maculae, dull red in colour, varying in size and irregularly scattered about. He placed himself at this time under the care of a well-known physician, who