abdominal or pelvic pains, inviting an exploratory laparotomy; twitches and paralyses, simulating the motor disturbances of encephalitis or disseminated sclerosis; and the varied hysterical symptoms of the so-called occupational neuroses, which may resemble cases of peripheral neuritis, tabes, or syringomyelia. In all but a few of these difficult cases the diagnosis can be effected on the lines already drawn—by a detailed physical examination and a detailed psychological investigation. In a minority of cases where doubt remains the diagnosis must be postponed until a re-examination from time to time has served to bring fresh evidence to light.

Pseudo-angina is really a form of conversion hysteria, and the distinction between it and angina pectoris should not be a matter of serious difficulty. The points to be relied on are the patient's age (at or after middle life in organic disease), dyspnoea on exertion, modified blood pressure, and sclerosis of the peripheral arteries. In the hysterical form, perhaps the most significant detail is the occurrence of attacks at times when the heart is least subjected to physical strain—during sleep, for example.

Much has been needlessly made of the difficulty of distinguishing an epileptic seizure from a hysterical fit. The distinctive features of epilepsy, including the sudden loss of consciousness at the onset, the comparatively short convulsive stage, and the recovery in a few minutes with mental confusion, headache, and perhaps vomiting, are all unlike a hysterical fit, where consciousness is rarely if ever lost, the movements are always purposive, shouting and muttered talking are usual, and the duration of the fit is altogether longer than that of epilepsy. The supposition of a "hystero-epileptic" attack is little in accord with modern psychological knowledge, and usually means nothing better than an equivocal diagnosis.

THE USE OF VITAMIN B IN CASES OF OEDEMA

BY

D. W. CARMALT-JONES, D.M., F.R.C.P.

PROFESSOR OF SYSTEMATIC MEDICINE, UNIVERSITY OF OTAGO,
DUNEDIN

In 1918 Professor Wenckebach¹ of Vienna delivered the St. Cyres Lecture in London, in which he described "the beri-beri heart." In beri-beri right heart failure often occurs, in which there is grave oedema, resisting cardiac drugs but disappearing at once on the administration of vitamin B. Profound oedema is always of serious significance in heart failure with congestion in cases of rheumatic origin. Every hospital physician is familiar with rheumatic heart cases which are constantly in and out of hospital, the intervals between the attacks progressively diminishing until the patients are admitted with extensive oedema; this admission is generally the last. There are occasional exceptions, but extensive oedema is often of the gravest prognosis in congestive heart failure.

In the light of Wenckebach's paper, I thought it would be wise to try the effect of vitamin B in such cases, to see if by this means any principle could be supplied, the absence of which was causing the fatal result. I used it first in two or three moribund cases, in which its effect, if any, was quite insufficient to postpone death. A few less grave cardiac cases showed some improvement, and afforded encouragement to proceed, but death was not prevented. In the oedema of pernicious anaemia, however, two striking results were obtained, and in some oedemas of other origin the results were satisfactory. The cases are briefly described below. The preparations of vitamin B used were "marmite" and "tiki-tiki," the nature of which is discussed at the end of the paper.

CASE I

A female, aged 22, weighing 19 st. 9 lb. Rheumatic fever one year earlier. Influenza with heart failure six weeks before admission. Admitted with dyspnoea, cyanosis, albuminuria, and extensive oedema. Treated for three weeks with digitalis, diuretin, and starvation; lost about 20 lb., but otherwise no change; pulse rate varied from 120 to 140 per minute. All drugs were stopped and marmite was given. For a fortnight there was improvement; the pulse rate fell to 110/120, and the oedema was reduced, but there was no noticeable diuresis. The fluid was probably lost by the bowel. Heart failure recurred, and the patient died in another fortnight. Post-mortem examination showed mitral stenosis and myocardial degeneration.

CASE II

A female, aged 60, under the care of my colleague Dr. Frank Fitchett; an old heart case with ten years' history. Admitted with heart failure, vomiting, and oedema, which was remarkably soft, involving the legs to the knees and arms to the elbows—an unusual distribution in a cardiac case; urine 15 oz. per diem. After two weeks' ordinary treatment she was given tiki-tiki, one drachm twice daily. Next day 42 oz. of urine was passed, the vomiting ceased, and in a week the oedema disappeared in the arms, and was much reduced in the legs. The pulse rate dropped from 110 to 100. The tiki-tiki had to be stopped on account of diarrhoea; shortly afterwards the patient relapsed and died. At post-mortem gross myocardial change was found.

CASE III

A female, aged 56, with chronic myocarditis and thyroid disease. Admitted on January 22nd, 1930, with heart failure, dyspnoea, palpitation, haemoptysis, dyspepsia, cough, asthenia, and wasting; cyanosed more than oedematous. Auricular fibrillation; liver to umbilicus; jaundice; small hard goitre. On January 26th the oedema began and persisted, though the pulse rate fell, and there was otherwise general improvement with the usual cardiac treatment. On April 24th (three months later) all drugs were stopped, and marmite was given. On May 16th she was much better, the urine increased to 30 oz. daily, the oedema was much reduced, and she was able to leave her bed. Unfortunately the thyroid condition was over-emphasized; basal metabolism was investigated, by which she was much upset; she relapsed, and died a month later. Post-mortem: chronic myocarditis; chronic venous congestion of organs; thyroid—colloid nodules, fibrosis, calcification, and degeneration.

In these three cases the vitamin acted as an efficient diuretic or stimulant to the alimentary tract; its chief physiological action is said to be on the latter. The patients were all beyond hope of recovery, but temporary benefit was obtained which might have tided over less grave cases.

CASE IV

A female, aged 45, with secondary anaemia and oedema. Admitted on September 29th, 1930, after severe gastric haemorrhage; red cells 2.5 millions per c.mm. On October 5th she was transfused with 20 oz. of blood. Slight deep oedema present in arms and legs; pulse rate 100 per minute. On October 10th tiki-tiki (half a drachm twice daily) was given. On the following day 60 oz of urine (not previously recorded) was passed. On October 15th oedema was gone, and the pulse rate was 80 per minute.

CASE V

A female, aged 52. Hemiplegia with unilateral oedema. Admitted unconscious, with severe right hemiplegia. There was slight oedema of the paralysed limbs, which became very marked in the arm, and remained so for two months; there was no recovery of power in the arm. The oedema decreased considerably with tiki-tiki; details are lacking.

In these two cases, also, there was a satisfactory reduction of the oedema: one had the impression that the vitamin was an efficient diuretic drug, but no dramatic result was obtained.

CASE VI

A female, aged 68, with pernicious anaemia. The anaemia was of two years' duration; one year before she had been in hospital in a crisis, and she had also been in a mental hospital. She was readmitted to Dunedin Hospital with heart failure. On December 26th, 1929, the red cells were 1.5 millions per c.mm., with a typical blood picture; the pulse rate varied from 100 to 160 per minute. She had the usual treatment with blood transfusions and liver diet. On January 5th persistent oedema of the legs was noted, and marmite was added to the diet. The oedema remained for some days, and then cleared up rather suddenly about twelve days later. The urine was not measured. (Marmite is not nearly so powerful as tiki-tiki, and in this early case it was not used with much conviction.) She was discharged with a red cell count of 3.8 millions.

CASE VII

A female, aged 59, with pernicious anaemia. Admitted May 17th, 1930, with the diagnosis of heart failure—dyspnoea, fatigue, aching limbs, and oedema. She was pale, with tick-tack heart rhythm, and showed a soft oedema to the knees and in the arms to the elbows, especially the left. There was a large effusion in the left chest. She lay for preference on the left side. Blood count was as follows: red cells 1.8 millions per c.mm., haemoglobin 40 per cent., colour index 1.1, white cells 4,000 per c.mm.; the blood picture was typical. From the left chest 12,000 c.cm. fluid was removed; two blood transfusions were given, and liver diet was taken; there was some general improvement, but the oedema remained. Urine 20 oz. daily. On June 18th, a month after admission, tiki-tiki (1 drachm three times a day) was given; on the same day 40 oz. of urine was passed. On the next day 54 oz. of urine was passed, and the oedema decreased. On June 29th the oedema had nearly disappeared, and fluid had been absorbed from the pleura. Urine 30 to 50 oz. daily. Tiki-tiki was reduced to 1 drachm daily on account of diarrhoea. The ward sister informed me that vomiting (not recorded in the notes) ceased when vitamin B was taken.

In the second case of pernicious anaemia it seemed clear that a change for the better took place when vitamin B was added to the diet; something wanting had been supplied. The fact is rather remarkable, as the patients were living on the ordinary diet of the district, which does not appear to be deficient in these particular properties. In this connexion a recent paper by Dr. Lucy Wills² is of great interest.

Two separate fractions are commonly recognized in vitamin B—B₁ and B₂; experts recognize several more. B₁ is the antineuritic factor, B₂ the antidermatitis factor. The most accessible source of vitamin B is yeast, chiefly eaten as marmite, which contains all the B factors. I obtained much more striking therapeutic results with tiki-tiki, in half-drachm to drachm doses. Tiki-tiki contains only B₁; it is a Philippine preparation made from rice, prepared by the Philippine Islands Government. My colleague Dr. John Malcolm, professor of physiology, obtained some through the good offices of the New Zealand Director-General of Health for animal experiments, and was kind enough to allow me to use some of it. Dr. Woods states that fresh liver contains all the B vitamins, but liver extract chiefly B₂. Since tiki-tiki contains only B₁, and is far more effective than marmite in reducing oedema, it is presumably this factor which is important, and cases of pernicious anaemia treated by liver extract should receive marmite for its B₁ content, or tiki-tiki if the latter is available.

As noted above, marmite is not a powerful preparation; we have not used it in measured quantities, but have given it spread on bread-and-butter with each meal. Dr. Wills mentions a drachm, three or four times daily; we probably used a similar quantity. Tiki-tiki is very powerful; a drachm twice daily has been given, but this dose soon had to be reduced on account of diarrhoea. Half a drachm twice daily was often sufficient; we also

had need to economize a preparation of which little was available. As far as these few cases are of any value I would suggest that vitamin B may be used with advantage in any case as a diuretic, but that in the oedema which sometimes accompanies pernicious anaemia, and probably in all cases of the latter, it is of great and specific value.

REFERENCES

- ¹ Wenckebach: *Lancet*, 1928, ii, 265.
- ² Wills, Lucy: *British Medical Journal*, 1931, i, 1059.

SHORTENING AN ELONGATED UVULA FOR THE CURE OF COUGH

BY

SIR JAMES DUNDAS-GRANT, K.B.E., F.R.C.S., M.D.

LARYNGOLOGIST TO BROMPTON HOSPITAL FOR CONSUMPTION,
AND THE CANCER HOSPITAL

The downright condemnation meted out to the long-lived operation of shortening the uvula for the relief of cough calls for a plea on its behalf. I am convinced that practitioners, general or special, of any considerable experience must have seen cases in which an intolerable cough has been completely removed by the operation, and must have been surprised to hear it described as "a discarded method" and "utterly unsuccessful in achieving its purpose." It would be most regrettable if they were to be deterred from affording such relief on account of the *ipse dixit* of any writer, authoritative or dogmatic.

In my letter on the subject in the *British Medical Journal* for September 19th, 1931, I referred to the value of the operation in "suitable" cases, and I promised to follow up my communication with a series of what I considered to be such. In general, I would say that a "tickling" cough on lying down, accompanied by an obviously elongated or trailing uvula, makes the case a "suitable" one for intervention, either by the application of astringents or the removal of the redundant portion of the uvula. If the suffering of the patient is not too clamant, astringents may be employed in the first instance, and I have succeeded in some acute cases of short duration in affording relief by applications of an astringent by means of a throat brush. I usually prescribe what I call "jam" in the form of two drachms of syrup of Virginian plum with six of glycerin of alum. If, however, this fails to act or the cough is extremely severe, the judicious removal of a portion of the uvula is called for with every prospect of success.

In support of my contention I offer the following consecutive series of cases; it is naturally not a very long one, because I avoid the operation unless in quite suitable cases, which are not very common.

Case 1.—Tickling cough at night. Tip of elongated uvula removed August 1st, 1929; two days later reported cough much less and sleep undisturbed.

Case 2.—Cough and tightness in the throat. Elongated uvula shortened October 15th, 1929; four days later reported cough and tightness better.

Case 3.—Complained of frequent loss of voice in reading and lecturing on account of coughing and sore throats. Elongated uvula shortened December 5th, 1930; fourteen months later reported that, since treatment, he had had no sore throat or laryngitis, and that he could read aloud with comfort, his voice being "both stronger and clearer than it had been for years."

Case 4.—Troublesome cough and very irritable throat. Elongated uvula shortened February 1st, 1930. Reported on February 20th, 1930, uvula perfect and discomfort gone. Treatment for lateral pharyngitis and tonsillitis subsequently required.

Case 5.—Tickling in throat at night on lying down, with occasional tightness and soreness. Elongated uvula shortened March 8th, 1930; reported April 16th, 1930, cough not so troublesome. Subsequent treatment of antrum carried out.