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

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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.

Case 6.—Patient a doctor; uvulotomy performed December 17th, 1930, on account of cough. Reported June 11th, 1931, "No irritating cough; your partial removal of uvula has been distinctly successful."

Case 7.—Tickling cough of two months' duration. Tip of uvula removed January 6th, 1931. Reported next day, cough much better.

Case 8.—Tip of uvula removed June 17th, 1931, on account of "choking" feeling. A month later reported quite relieved.

Case 9.—Tip of uvula removed July 1st, 1931, on account of cough on lying down. Reported November 25th, 1931, cough much better for a month and still much less than before operation; can now lie down without coughing. Patient has bronchitis.

Case 10.—Tickling cough at night or in a warm room. Elongated uvula shortened October 19th, 1931; reported October 27th, 1931, cough gone.

Case 11.—Elderly man, bleeder, tickling cough at night four months. Trailing uvula shortened with scissors, galvano-cautery to raw surface, December 8th, 1931; no haemorrhage. Reported a week later, and recently, cough quite gone, "a great success."

My colleague Dr. P. H. Abercrombie, writing on September 26th, 1931, reminded me that many years ago I shortened his uvula with the "very greatest relief" to him. "My trouble was an irritating spasmodic cough on lying down in bed on my back; more than once it resembled a mild attack of whooping-cough. After thoroughly cocaineizing, you removed fully half an inch of my uvula, and the cough has never bothered me since! You may add my name to your list, if you like, and I can honestly say that I have quite a number of times relieved and removed an irritating cough by shortening an elongated uvula."

Most of us have seen cases of inordinately long uvulas which appeared to nestle down quietly without causing any symptoms whatever; to shorten these would serve no good purpose. As a rule Dr. Feldman's proviso is appropriate—that the operation is called for only when there is no other apparent cause for the cough, such as tuberculosis. There are exceptions, however, as, for example, in a few cases of tuberculosis of the larynx and lungs, in which the exciting cough is increased in intensity and in frequency by the presence of a trailing uvula, with its characteristic symptom of tickling cough on lying down. In such cases I have diminished the suffering very greatly by discreet and almost bloodless shortening of the uvula. Another exceptional case was one of icus laryngis, McBride's laryngeal syncope, commonly misnamed "laryngeal vertigo." The patient was a middle-aged man suffering from cancer of the inlet of the larynx, with narrowing of the air-way. On several occasions he had dropped down at the commencement of a cough. I found an elongated uvula, the presence of which excited the cough. I therefore shortened it, and during the brief remainder of his life the patient was free from cough and attacks of syncope.

A word or two on the little operation may not be out of place. After anaesthetization of the uvula a pair of scissors are held in the right hand and a forceps in the left. The scissors are used to depress the tongue while the tip of the uvula is gripped with the forceps and pulled forwards. The scissors are then used to cut through the uvula *upwards and backwards* so as to leave the raw surface on the posterior aspect of the organ. The portion left should be of the size of a small normal uvula. The ring end of the scissors may with advantage be curved slightly downwards so that the knuckles of the right hand may not obstruct the view, and the distal end may be very slightly curved upwards. It is very helpful, however, to have sharp points on the grasping parts of the forceps, as the uvula is most elusive, especially when the tongue wobbles actively.

The ideal result is obtained if the removal of a small semi-oedematous elongation beyond the muscle is sufficient

to produce the desired effect, but this is only occasionally possible. As a counsel of perfection it has been proposed to cut a wedge out of the tip and bring the little flaps of mucous membrane together with a stitch. Under ordinary circumstances we have to be content with a less elaborate technique. I find it very desirable to minimize the chance of haemorrhage by applying the galvano-cautery to the raw surface, and I have amputated by means of the galvano-caustic snare, though without any very special advantage. In respectful dissent from the opinion of those who hold that calcium is effective only if administered by the veins, I have found it advisable to prescribe calcium bromide before meals and at bedtime for the two or three days preceding the operation, to quiet the nerves and increase the coagulability of the blood.

If these remarks encourage the practitioner to shorten uvulas in appropriate cases, as of old, I am sure much relief will be afforded which is otherwise withheld.

DIVERTICULUM OF THE MALE URETHRA

WITH A SUGGESTION AS TO ITS ORIGIN

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This condition is rare, there being about one hundred cases described in the literature. Many hospitals see, perhaps, one case in five or ten years.

It has been the custom to distinguish between cases supposed to have a congenital origin (although the diverticulum does not show itself until quite late in life) and cases which are acquired as the result of urethral obstruction or trauma. The explanation offered of the congenital diverticulum is that at birth there is a flap-like obstruction where that part of the urethra which arises in the cloaca joins with the part which was formed in the external genitalia. It is supposed that in a few hours increasing urinary pressure overcomes this obstruction, but there is left a tiny potential diverticulum. Later, in middle life, for some obscure reason, this sac suddenly enlarges and becomes a clinical entity. Now this theory puts an undue strain on the imagination. It resembles other embryological hypotheses made in the early days before research had placed this science on its modern foundation. Such a pioneer hypothesis was that which accounted for the downgrowth of Meckel's cartilage by manual traction exerted by the foetus.

The second class of urethral diverticulum is easier to understand. The acquired obstruction of a stricture or stone causes the proximal urethra to dilate, and later to form a lateral expansion; or a break in the wall of the urethra may result in extravasation of urine into a space which becomes lined with epithelium; or a peri-urethral abscess or extraneous cyst may burst into the urethra; or there may be a pressure dilatation of Cowper's gland or of the uterus masculinus. Finally, after perineal prostatectomy, the cavity from which the prostate was removed may dilate and present in the perineum. Its passage forward is prevented by the triangular ligament.

DIAGNOSIS OF URETHRAL DIVERTICULUM

This is often made during the investigation of other conditions, which themselves gave rise to the diverticulum. Should the diverticulum dominate the clinical picture, the landmarks are a fluid swelling, associated with frequent micturition, poor stream, and perineal discomfort. The swelling is perineal, scrotal, or penile. The frequency is of the type of a dribble when seated or lying down, or on standing or walking.