

Whitehead's operation differs from the one just described in that the English surgeon does not preliminarily ligate the lingual vessels.

Hemorrhage, shock, inflammatory perversions, and septicæmia are the dangers associated with operations upon the tongue, which dangers the prudent surgeon guards against by every precaution known to the science. After an operation of magnitude upon this organ, it is always prophylactic practice to prescribe veratrum viride, bromide of potassium, and morphia; while as a local detergent, nothing better can be used than the phénol sodique, in proportion of a dessertspoonful to a goblet of water, tinctura capsici et myrrhæ being added to the extent of a teaspoonful if suppuration follow, or, if acute inflammation supervene, this conjoined with the fluid extract of hamamelis Virginicus or lead-water and laudanum.

Tongue-Tie.—The condition denominated tongue-tie is frequently met with in young children, and, indeed, occasionally in the adult. Tongue-tie is simply a shortening or curtailment of the anterior mucous frænum. A tongue that cannot be projected beyond the teeth, and which, in the attempt at projection, has its tip turn downward, is tied. A tongue so fixed cannot perform its offices comfortably and naturally. Upon examining the mouth of a person thus afflicted, the tip of the organ is not infrequently found set to the floor of the mouth, incapable, indeed, of any movement. This, however, is an extreme case, the usual condition being simply curtailment of ordinary motion.

Tongue-tie is of two kinds, adventitious and congenital. Of the first, that arising from ulceration is the most common. A person having a bad ulcer under the tongue, particularly if on the side of the frænum, is almost sure to have the fold shortened as the result of cicatrization.

A second expression of this first form is one described by Professor Dewees; exceedingly rare, but necessary to note.

There is found, says Dr. Dewees, attached to the frænum of the tongues of new-born children a nearly transparent, whitish membrane, which pursues the bridle through its whole course, continues beyond the point where it stops, and terminates near the extremity of the organ itself; so that the tongue is tied down, as it were, to its proper bed.

In consequence of this disposition of the frænum the child cannot elevate the tongue nor protrude it beyond the lips, and in attempts to suck cannot apply it with sufficient force or certainty to the nipple to make a complete exhaustion; therefore it sucks but imperfectly, and the act is accompanied by a clucking kind of noise. Whenever this is observed the mouth should be examined, and it will almost always be found in the condition just described, but not necessarily, as there may be clucking without this membrane; but the membrane, we believe, is never without the clucking.

This membrane is easily discovered by provoking the child to cry or by elevating the point of the tongue by the extremity of the little finger. In making the attempt to raise the tongue the child is almost sure to

cry; and then this tissue is readily discovered, as it is put fully upon the stretch.

The defect is easily remedied, being corrected in the following manner: Let the child be laid across the lap of the nurse, with its face toward a proper light, the operator standing behind the head so that he does not intercept the light. The chin of the child must be gently depressed by the forefinger of the nurse. When it is thus lowered the little finger of the left hand of the surgeon is to be insinuated between the side of the tongue, near its tip, and the inner corresponding portion of the jaw, until it can lift up the point of the tongue, which being done, the membrane is immediately brought into view and put upon the stretch; or, should the child now begin to cry, as it almost always does, the operator can easily place his finger under the tongue and keep this false frænum tense, while by a single stroke directly across it by a sharp gum-lancet he divides it to the true frænum; the operation is then finished. We have never known it necessary to repeat this operation. The incision through the membrane never yields more than a small drop of blood; no hemorrhage can ensue, as the tissue is but very slightly vascular.

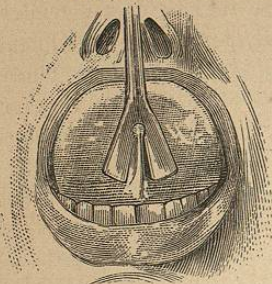
A third of the adventitious forms, occurring in the adult, is the result of induration of the frænum. This is occasionally venereal in character, or it may be cancerous. In these cases the band gradually thickens until the motion of the tongue is markedly impaired. The cancerous is distinguished in its incipiency from the venereal disease by the greater pain associated with the movements of the parts; in the first the pain is acute and sharp, in the second it is soreness rather than pain. If the induration be malignant the parts may be excised, still better, let alone, the hope of cure being very slight; if venereal, a specific treatment conjoined with such general and local combinations as may seem demanded by the circumstances of the case is to be pursued. The practitioner is to avoid over-irritation.

Congenital tongue-tie is quickly appreciated by lifting the tip of the organ. These cases differ very much, the frænum at times being observed to run as in the normal course, except that it is much shortened. In other instances the fold passes forward almost to the apex. It may be free or tight. If the first, it forms a septum between the lateral aspects of the floor of the mouth, but is not otherwise inconvenient; if the latter, it ties the tongue more or less closely.

The relief of a congenital tie consists in nicking, or cutting, the contracted frænum. This operation, although of the simplest nature, requires to be performed with some care. A frænum too freely cut permits of the tongue being pulled quite far back into the fauces; cases are on record where suffocation has nearly resulted from such accident. Again, it is not to be forgotten that the ranine vessels inosculate just in front of the frænum on the under surface of the organ, and that they might very easily be divided in an operation. Many children have lost their lives from such an accident.

A proper operation consists in making a simple nick midway between the tongue and the floor of the mouth; a rupture of the parts thus effected, the motions of the tongue will quickly secure all the latitude required. Should

FIG. 397.



Division of the frænum while held up by director.

an operation unfortunately open a vessel, the best practice would be to secure it with a ligature; but this is not always easy of accomplishment, the artery retracting within its loose sheath. An instrument devised by M. Petit to control such a hemorrhage consists of a piece of ivory, cut fork-shape, the prongs, of which there are two, passing on either side of the frænum, the short handle resting against the inside of the jaw. To apply this instrument introduce against the bleeding vessel a tuft of lint saturated with alum-water or other astringent, then place the fork about it and secure it by pressing it down with the tongue, over and around which and the jaw a roller is to be thrown. A much better means, however, would be the use of the Morrison Compressor, which see. Guersent, in his "Surgical Diseases of Children," recommends the serre-fine, or the retention, for a time, of agaric against the part. Another means, where the wounded vessel is not too far retracted to be caught, is the employment of torsion. The use of nitrate of silver or of Monsel's salts in these cases cannot be too forcibly discountenanced, the injury done by either to the tender parts making secondary hemorrhage almost a certainty. The position of the lingual vessels in danger from operation for tongue-tie is seen by reference to Plate II., Fig. 2.

Swallowing the Tongue.—Swallowing the tongue, as it is called, is a disagreeable accident, and may occur without section of the frænum. Dr. Dewees mentions one case in which a child became choked several times a day from such a recession. This case was always, however, relieved by the nurse, who would press the organ down with the handle of a spoon and then draw it forward.

Operation for Tongue-Tie.—To operate for tongue-tie it is best to place the body of the infant upon the lap of the nurse, the head being received upon or between the knees of the surgeon; the tip of the tongue is then raised, and the cut, or nick, made with a pair of curved scissors. Fig. 397 shows the frænum exposed and held by means of the nick in a director.

CHAPTER XXXVII.

THE UVULA AND ITS DISEASES.

SURGICAL anatomy recognizes the uvula as muscle inclosed in a bag of mucous membrane, the connection between the two being a varying amount of loosely related cellular tissue.

The frequent and only common local disease of the uvula refers to enlargement of the organ. Enlargement is by reason of relaxation, by cellular engorgement, by hypertrophy, by neoplastic associations.

Persons of lax tissues are not unapt to possess a uvula of such undue length that serious irritation of the fauces is provoked, phthisis pulmonalis being too often a consequence. Examination of the condition reveals a pale relaxed apex, the distinction between muscle and membrane being very marked.

Enlargement by cellular engorgement finds explanation in serous infiltration. The writer has encountered cases where, in a single hour, the organ has swelled to the size of a shell-bark, and where immediate relief was necessary to the saving of life. Cases of this kind relate with laxity of tissue associated with acute inflammatory attacks, although, as a reverse to this, instances are met with where tonicity is the characteristic of the individual at large. The organ, when this condition exists, has much the appearance, and certainly all the characteristics, of a water-bag.

Hypertrophy, as an uncomplicated condition, is not at all common, and when met with, has its meaning in organization of plastic lymph exuded between muscle and envelope. The subjective symptoms are described by the patient as a lump in the throat and interference with swallowing.

Neoplasms refer to new formations of cancerous relation, and are always of secondary signification, the disease extending to this from neighboring parts; the signs are pre-existence of the vice, local enlargement, hardening, nodulation, specific pain, progressive degeneration.

Tumors, analogous to those so often produced in the lobes of women's ears by the wearing of rings, are occasionally found pendent from the tip of the uvula. Fatty growths are also alluded to as having been met with. Defined cysts are described as of occasional occurrence.

Treatment.—Treatment of uvular disease is according to indications. When the organ is simply relaxed, the mucous bag being the tissue involved, no cure equals amputation of the redundant part. To accomplish this the author now universally employs the plan of empaling the tip upon a tenaculum (Fig. 398), and incising with scissors curved flatwise. The use of a tenaculum