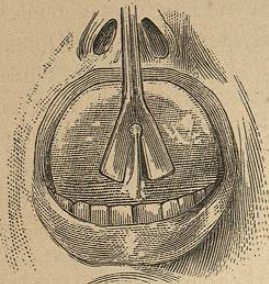


A proper operation consists in making a simple nick midway between the tongue and the floor of the mouth; a rupture of the parts thus effected, the motions of the tongue will quickly secure all the latitude required. Should

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.

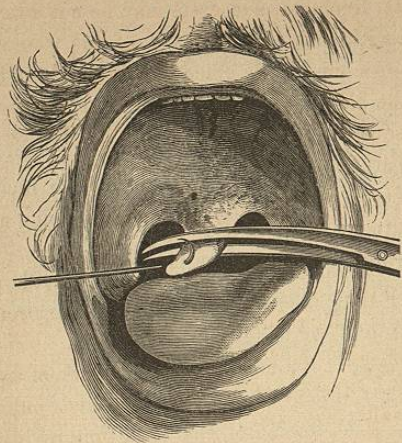
Neoplasms refer to new formations of cancerous relation, and are always of secondary signification, the disease extending to this from neighboring parts; the signs are pre-existence of the vice, local enlargement, hardening, nodulation, specific pain, progressive degeneration.

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

for fixation and control is so superior to all other means as not to allow of too much commendation. In the case of children ether is to be given, and the

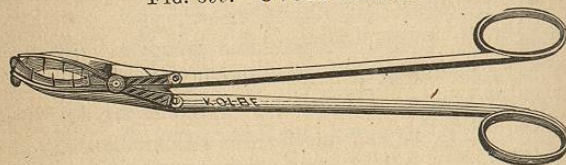
FIG. 398.



mouth held apart by a Kolbe or other gag. Fig. 399 shows a form of scissors much used; the teeth have the intention of catching and holding the excised part.

Enlargement from serous effusion demands effective treatment. Iodine, muriate of ammonia, and other sorbefacients are recommended, yet are tried

FIG. 399.—UVULA SCISSORS.



only to be found unreliable. Every cell of the connective tissue communicating the one with the other, accommodating the serum, it is alone necessary, in order instantly to drain the tumor, to snip off the apex, otherwise to slit the uvula; preference to be given the first of the operations.

Hypertrophic enlargement of the uvula is treated by the use of sorbefacients, and by pressure applied through the daily use of forceps faced with rubber; fifteen minutes are required for the latter purpose, the handles of the instrument being retained in the grasp of the operator's hand. A second manner of exerting pressure employs a rubber ring, applying it by means of forceps not unlike those used with the rubber dam. To avoid accident, a string is attached to the ring, which string is brought out of the mouth, and may be

attached to a button-hole. Still another plan employs collodion; the uvula, after being dried by means of bibulous paper, is thoroughly coated, the performance being repeated several times daily. If the lower half alone be involved, amputation is the remedy.

Simple fibromata, lipomata, and cysts may be cut away even to the extent of removal, along with them, if necessary, of the whole uvula.

Restrictions.—As one of the offices of the uvula is to convey the mucus and saliva about the base of tongue and epiglottis, acting thus as an agent of lubrication to these parts, it is objected that ablation of the organ results in a dryness of the parts more irritating than the offence removed. Objection is also advanced that as the uvula possesses the function of holding the soft palate tense and firm in the median line against the pharynx during the act of deglutition, thus preventing the passage of fluid or of solid substances toward the nose, amputation of it must result in serious inconvenience. As loudness in speech is concerned, the organ is credited in exercising much influence through its capacity as a levator or shortener; this as the muscular portion is involved. Speech, according to Sir Duncan Gibbs's experiments, is modulated by the soft palate and uvula, and the motor power of the latter is unquestionably exerted, he maintains, in pronouncing the letters K, Q, and X, with their associations, more especially in the gutturals of the various languages. Concerning these objections the writer has to note a clinical experience which in no way indorses them. Caution in performing operations of the kind on the persons of public singers or speakers is, however, not unwisely considered and practised.

Hemorrhage from amputation of the uvula is seldom found to require attention. The author has operated a great number of times, and never, except in a single instance, met with bleeding to an extent demanding treatment; in this one case it yielded to a gargle of alum-water. A feeling of rawness associated with the excision, and which is the principal complaint, will be found corrected through the use of crystals of gum arabic held in the mouth, or, if preferred, marsh-mallow or jujube paste may be used,—solid food is to be excluded from the diet for a short time.

CHAPTER XXXVIII.

DISEASES OF THE FLOOR OF THE MOUTH.

ENCIRCLING the tip and sides of the tongue is a space bounded externally by the inner face of the maxillary alveolar process, which space constitutes the lower boundary of the mouth; its floor is the mylo-hyoid muscle; its carpet a plane of mucous membrane. Anteriorly this space is divided into two parts by the *frænum linguæ*. Floor and carpet are separated by cellular tissue which might not inaptly be likened to a single layer of wadding related by one face to the first, by the other to the second, structure.

Imbedded in this cellular tissue are the sublingual glands, together with their vessels of outlet. Passing through it are the Whartonian ducts. Lying beneath the floor of the region are the submaxillary glands. A large vein crosses it. The most common of the diseases of the locality, as the author has met with them, is tumefaction arising out of sympathetic disturbances; notably, alveolo-dental inflammations. Cases will be encountered where the mucous membrane is so thrown upward, as a result of effusion into the underlying cellular tissue, as to assume a place on a level with the teeth. In glossitis such infiltrations are not infrequently of an extent that throws the membrane as a partial envelope about the sides of the tongue. Treatment is to be directed to the primary lesion.

The second most common disease arises out of obstruction in the salivary ducts. The trouble shows itself either as a raised roundish line running from an inflamed point beneath the tip of the tongue; as a cystoma; or as a tumor, lesser or greater in size, of stony hardness. The swelling known as frog-belly ranula is an example of salivary obstruction.

Ranula.—The term, not a good one, is retained because of the familiar position it holds in surgical nomenclature.

The subject is one easily comprehended. A ranula is the analogue of a sebaceous tumor, being simply a cyst of retention; a collection, the result of the closure of a tube of outlet. The tumor thus designated is found principally beneath the tongue; it is a swelling varying in size and in expression according to the circumstances of its existence, at times being observed when not larger than a pea, at others so great in bulk as to throw the tongue back into the fauces. Ranulæ are occasionally met with which fill the whole oral cavity; such dimensions, however, are uncommon.

If we were to tie or otherwise obstruct one of the tubes just alluded to, it would be natural to expect that the secretion accumulating back of the ligature

would expand and bulge out the duct into the form of a tumor. This is really the very simple history of the formation of a ranula.

Ranula, thus provoked and formed, varies as much in appearance and character as in size. In one case it looks and feels almost precisely like the belly of a frog, the enveloping cyst being thin and attenuated. In other instances the walls are thick. The contents present varying characteristics, being watery, semi-solid, or solid even to the hardness of stone. Commonly it consists of a yellow albuminous-like substance, which, for evacuation, requires pressure upon the tumor after an incision has been made.

A ranula, the contents of which are watery, implies, as a rule, that the disease has been of short existence, the fluid being simply the secretion from the gland unchanged in character. In the ranula of semi-solid consistence an explanation is found in the partial absorption of the more fluid portion, leaving an inspissated mass. In the solid ranula the encystment is the common salivary calculus,—being precisely the same as is seen upon the sides of the teeth, except in the absence of the common detritus of the mouth. Such a ranula as the last is found to be of long standing; absorption of the watery part has gone on until what remains is the limy portion of the secretion.

A thin cyst implies a rapidly-formed tumor unattended by vascular excitement, the envelope being a simple attenuation of the walls of the duct and overlying parts. This form of ranula very frequently ruptures, and thus effects a self-cure. Cysts, thickened and hard, imply tumors of slower growth and the association of vascular changes resulting in the effusion within the cyst-wall, and the organization of a greater or less amount of lymph. Cysts thus thickened may compose the bulk of ranulæ, the cavities being small in comparison.

A ranula gives trouble from its size and location, seldom or never degenerating. It does not seem true, either, that harm results to digestion from the loss of the secretion, such loss, indeed, being more apparent than real, the associate glands performing excess of work. A ranula attaining great size would necessarily intrude upon all the surrounding parts, thereby provoking secondary lesions which might very well prove of more serious character and consequence than the original disease: thus, cases are on record where the teeth have been forced from their sockets, where large ulcers have formed against the inner face of the lower jaw, where necrosis of extensive character has been provoked, etc.

TREATMENT.—This, in principle, consists simply in opening the tumor, evacuating its contents, and so conducting cure of the wound that it shall not entirely close, securing and preserving in this way an orifice of exit for the secretion.

In the frog-belly tumor it is found sufficient to catch up with tenaculum or forceps a portion of the sac, and with the scissors or bistoury cut it off: the edges of the wound then to be cauterized, and the case left to nature.