CHAPTER LXI.

THE TUMORS OF THE MOUTH.

THE EPULIDES.

Tumors of the mouth most frequently met with are those seen growing upon the gums, and known as the epulides. These growths, in almost all instances, first be observed making their way from about the neck of some particular tooth, pushing out apparently, from the socket, being found to originate from the odontoperiosteal membrane.

As the epulides, like other tumors, classify themselves into self-explaining and non-explaining, the term epulis, still in quite common use, is without proper significance when employed as a term substantive. It is derived from the Greek words επι and αίλος, signifying "upon the gum"; it is to be accepted as distinctive of situation only, so that, in using it, one expresses simply that a growth spoken of is upon the part classically designated.

Histologically expressed, the epulis tumors are to be arranged as follows: epulis-fungoid, epulis-keratoid, epulis-fibro-vascular, epulis-sarcomatous, epulis-endothelial, epulis-osteomatosus, etc. Clinically classified, we have to concern ourselves only with benignity or malignancy, as this alone will lead us to a required treatment.

The single epulis tumor which may with certainty be known as benign is the pulp-fungoid. A second form, which is usually found so, is the keratoid. Any of the epulis which does not exhibit itself as one or the other of these forms is to be deemed cancerous, and treated with the latitude given to cancer. No other inference is to be made to the benefit of the patient.

A pulp-fungoid growth is self-explaining. An epulis tumor is fairly so from analogy with the common vascular navi: it is, in fact, a navi. Besides these two, no other of the epulides possess explanation of their presence or development. The epulis-fungoid growths demand a treatment peculiar to themselves; so, also, do the keratoids. All the other epulides are to be treated on a common principle. From such data, which may be accepted as reliably reliable, the surgeon is led to perceive that an appreciation of the first two incurs clinical understanding of all the other conditions. This is, knowing two, he knows all the rest.

The Epulis-Fungoid Tumor.—By an epulis-fungoid tumor is meant a fungoid growth of an exposed degenerating tooth-pulp. This tumor is as common as it is simple and harmless, and is certainly to be seen in a thousand cases to one of any other form. The fungoid pulp tumor is met with under the various aspects exhibited in Fig. 553.

Referring back to Figs. 41, 42, and description, the dental pulp is recognized as a stream of delicate connective tissue, in which streams ramify blood-vessels and nerve-fibers; this structure occupies the cavity of a tooth, and is liable, through the accidents of decay or fracture, to become exposed. When so exposed, it is not unlikely to undergo fungoid degeneration.

Fig. 553, Subfig. 1, is an outline drawing representing the walls of a tooth-root enveloping its pulp, which pulp, slightly fungous, projects a trifle above the level of its cavity. In nolar roots, the crown being gone, such form of pulp-tumor is very common. No difficulty exists in its recognition, as the boundary-walls of the cavity are plainly to be observed. A form of such tumor, a trifle complicated, is exhibited in Subfig. 2: here, as is seen, the fungus is of such extent as to overlap the boundaries of its cavity; any confusion is avoided, however, by thrusting the mass aside, when its character is at once made evident. Subfig. 3 represents another condition: here the mass has increased to such extent that it not only conceals the cavity, but also roots upon the surrounding gum, to which, not unlikely, it will be found to have formed attachments. Still another form is exhibited in Subfig. 4. Here a tooth-root may be below the border of its socket. No pulp projects from nor is seen upon the face of the canal; a break exists, however, upon one side of the root, out of which grows the fungous mass. Such a growth, little by little, insures the absorption of the alveolus on this side at which it projects, and rising, finally, above the free face of the gum, exhibits a condition well calculated to mislead. This tumor is readily distinguished from the odontoperiosteal growths by the nature of the proliferations, these being of a livid anemic appearance, not common to any other of the epulides. This last form of tumor is not at all frequent; it depends for its existence on such a break in the continuity of a tooth-root as seldom occurs. It is to be remembered, however, that a decay commencing at the face surface may run along the root of a tooth, and that out of this track the fungus may project.

Fungus of the dental pulp, of an extent and character described in conditions 3 and 4, is, however, as infrequently to be met with as conditions 1 and 2 are common.
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A form of epulis simulating, as location is concerned, the pulp-fungus, is exhibited in Fig. 554. In this instance the tumor, while seen to arise from the pulp-cavity of the fang, when traced, is found to be an outgrowth of that aspect of the alveolar-sulcular membrane which adjoins the bone; the growth has passed through an opening in the root, and has progressed, as shown in the dotted lines, until reaching the margin, it becomes exposed. The drawing should show the tooth in section.

To mistake this last form of tumor for the ordinary pulp-fungus would be to err necessarily in the treatment, the four conditions represented in Fig. 553 requiring either the destruction of the fungus by means of cautery, or the extraction of the affected tooth; while this last necessitates removal of a portion of jaw found implanted.

Still another form of epulis tumor* consists, as exhibited in Fig. 555, of an ulterior outgrowth, the result of irritating influences associated with double approximal dental caries; the gum-tissue, semi-stratangulated, rises and fills the cavity. A similar expression of transfiguration is not infrequently met with in the interspace existing between teeth in which the V-cut has been made; indeed, these growths are encountered where they have not only completely filled such interspaces, but so projected above the grinding faces of the teeth as to be injured at every occlusion of the organs. The treatment consists either in extracting one of the approximating teeth, in so altering the relation of the necks of the teeth as to obviate the strangulation, or, after cutting away the mass, and by means of cotton wedges forcing the structure entirely clear of the cavity, in restoring by contour filling to the original relation of the parts. A temporary cure can consist in keeping the sites of projection stuffed with plugs of cotton saturated with gum salicylate.

Reviewing the tumors just described, it is seen that, with a single exception,—that shown in Fig. 554,—all are, very simply, self-explaining.

Epulis-Breast-like Tumor. This is a vascular growth, the analogue of the normal; it is commonly associated with the pyorrhagia state, and has in character marked by its variation in size and appearance as influenced by the conditions of the circulatory system at large,—excitement increasing its turgescence, quiet reducing it. Turgid in a general appearance, epulis-breast-like tumors present, however, decided features of variation. Thus, some represent a congeries of vessels which would seem to need the nearest scratch to cause profuse hemorrhage. A common feature of vascularity exists in a likeness with the tissue of corpus cavernosum penis, the cellular stroma being thinned into a series of communicating cells, which are found congested or otherwise, as circumstances control.

Breast-like tumors are also not infrequently found quite solid, simulating fibrous structure; this depending on some vascular perversion which has produced excess of the fibro-cellular element; indeed, it sometimes happens that spontaneous cure is effected through solidification. The surgeon, acting on such a hint, employs the process as one of his means of cure. Of the various forms of epulis-breast-like tumors, the spongyis by far the most common,—is, indeed, to be placed as the type; stimulation of the circulation will fill it at times to bursting; pressure may almost completely empty it.

Whether an epulis tumor come under the definition of arterious, venous, or capillary, depends simply on the vessels most involved. A tumor, aneurysm by anastomosis, applied to these growths by John Bell, had its foundation without doubt is that variety in which the arterioles are implicated. This species, when congested, presents the scarlet hue, and, if accidentally wounded, is most tender, and control of hemorrhage is concerned. The venous variety is made up of a congeries of vessels the tumor is dark and commonly sluggish in aspect. The capillary form is intermediate between the arterial and the venous, and constitutes the spongy form. The underlying bone of the epulis epulides will almost invariably be found involved, being softened and spongy. Breast-like tumors sometimes, though rarely, make their first appearance as a red nipple upon the gums, growing in a polyphoid form until they may attain the size of a cherry.

TREATMENT.—Tumors of this class involving the bone as they do, can be cured only by a section which includes that structure. A diagnosis is easily secured by passing an exploring-needle through the soft tumor; if the hard parts be implicated, the needle is found to enter freely, and may be moved about among the loops strumos; if the needle does not pierce the bone, and the tumor be at all pedunculated, it may be strangulated; or, even where the base is broad, the ligature may yet be used, transfixing first the base with one or more needles for the proper directing of the thread.

A second mode of treatment, applicable when the bone is not involved, is by injection; the ordinary hypertensive syringe being employed, charged with one of Miesmer’s solutions of iron, with a very concentrated mixture of iodine, or with the gallic acid solid. Any substance which will conglutinate the blood may be used, and not infrequently is found to answer a satisfactory end. The employment of this means of cure is not, however, unattended with risk from emboli. Still another method consists in the application of cautery, such as chlorode of zinc, Vienna paste, the London paste, or the strong mineral acids. An anxiety, however, which must always accompany the employ-
most of these agents, is the fear of hemorrhage on the cutting of the tongue, and such anxiety is so well grounded that experience soon teaches that the means of cure is applicable only in the last vascular of the growths.

The seton, in some cases, finds not infrequently happy service in the excision of the epulis. The needle used is that employed by the surgeon in passing ordinary ligatures in silk. The seton may be sealed, or not, in some cases. The thread of linen, which the eye of the needle will admit, in this way incising the capsule of the tumor and incision up the neck of the growth and incision through the hard palate, or the maxillary sinus, or the septum of the nose. On one or three occasions the author has found himself enabled to control such a hemorrhage by cutting the ligature around the neck, as best might be done, thus cutting the ligature; the lancet, using the seton, will on some occasions find the employment of a strangulating ligature forced on it. Such hemorrhages are, however, very infrequent, and may not be met with in one out of a hundred cases. They are most commonly associated with the artery of the artery of the muscle.

Electrology is another means of treatment sometimes employed (see Treatise on Tumors), and it is highly favored in its application; the object should be the coagulation of the blood, rather than its elimination from the system of the tumor. Although destruction is preferred by many as the best service of electrology, it is to be recognized that the mode of using the agent suggested has the advantage, inasmuch as it is a certain assurance against hemorrhage.

A practice of “incisional removal” has been introduced into English surgery, consisting in tearing or tearing or twisting away fragment after fragment of the principle being to avoid hemorrhage; as is the situation of the artery. This is a practice, however, which the inexperienced will do well to avoid; not that, in certain cases, it is a good plan of treatment, but frequently it has troublesome associations, not the least of which is active hemorrhage.

Still another treatment, employed where a tumor has no connection with the bone, is the application of the seton itself. This is a spring wire for any of the requirements, and as to be clamped over the mass. In using these clamps, regard is to be had to the nature of the secretion, these being used deep or shallow according to the cavitary of the part to be grasped; the pressure of these clamps will not infrequently result in a coagulative and expansive action, which proves the cure of the tumor.

An application somewhat on the principle of the seton itself is the employment of pressure. The parts having been first emptied by forcing out the blood, a well-adjusted compress is to be bound tightly over the tumor, and

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retained in place continuously for several days; this treatment, when the growth is small, will often effect a cure. An admirable plan of securing a desired pressure is to take an impression of the jaw on which the tumor is situated, and, obtaining thus a model, make a plate precisely so as for an artificial contour, having bands, to hold it firmly in place, fitted to clamp neighboring teeth; by now placing over the tumor a layer of cotton-wool, and compressing it by filling the plate in place, pressure of a very effective type will be found to be safely secured. Advantage is gained by employing suitable solutions of metallic silver in conjunction with the plate; saturating the wool with a dilute preparation of Muriatic acid is a very good purpose. Tonic acid may be used.

The erosive forms of the epulis, while not so clearly explainable as the pulp-fungus, are yet to be esteemed as local malignancy and of innocent type. An analysis of an erosive growth exhibits it as a thing of vascular tissue. In it is to be recognized vascular anatomical perforation.

From the consideration of the epulis of self-explanatory character we pass to that of forms, all of which experience assures us are best esteemed, and most wisely treated when accepted, as belonging to the second class. The author so treats them because, while they may not all express the manner that he cannot prove that they do not. By treating them with the kindness given to cures, nothing detrimental to an innocent growth is done, but everything in the way of cure possible (with our present knowledge) should the disease be malignant. This practice the writer himself should continue to pursue—finding in it the commendation of his highest intelligence—until the typical something is discovered which shall allow him to know a cancer in its own expression, just as to-day one might not easily be deceived in a horse or a mule.

Epulis not Self-explaining.—We pass now to that consideration which includes every other epulis tumor met with in the mouth; histologically, we would class them as myxoid, sarroid, myxoid, fibroid, etc.; clinically we are not interested in giving them any name at all; the single concern with our classification being as to self-explainability or non-explainability. With the epulis the author has not much to do; he may be pardoned in suggesting that in the direction of having had, perhaps, wider opportunities of observation, as the result of such an experience, he believes that he advances the highest truth, and that which will be found to be concluded to the greatest good of patients, when he teaches that a growth is to be called, treated, and trusted as cancer which cannot be proved not to be cancer.3

3The author of course sees that here are involved the learning, experience, and judgment of an observer. But with all grades of intelligence, he must perceive his position solely to be that of a man who has no right to assume that the highest intelligence has not yet arrived at the appreciation of what manner it is. It is great misfortune for a patient to fall into the hands of a man who does not know—"the extent of the known."—what is not known.
Cancer is treated in consideration of a twofold expression belonging to the condition. When infiltrated, that is, when parts adjacent to a tumor are in marked sympathy, being engorged and chased dimly into healthy structure; when glands are indurated and lymphatic is marked; then, not knowing any antidote to the virus, a surgeon can do nothing for a patient. When, on the contrary, a cancer lesion is strictly localized, when a tumor is clear, it does not shade gradually away, but possesses a strict individuality, like, for example, the concentric fibroma, then, let it be epulis, or of whatever situation, ablation is intended; on the principle of assistance rendered to something which offers expression of attempt to help itself.

Accepting the premise, we find in the character of an epulis tumor the practice pertaining to it. If the premise be right, induction or confusion has no occasion for existence.

Proceeding Figs. 556, 557 as illustrations of some of the various expressions of the epulis, attention is to be directed, with benefit to many, perhaps, to a description of the cases, together with the practice adopted, and the results.

CASE, FIG. 556.—Some four years ago, Mrs. T., the sister of a medical friend, was brought by the brother to the office of the writer for consultation on a tumor (about the size of an ordinary pea) growing from the alveolus of an upper molar tooth. This tumor was thought to belong to the class pulpitis. There was a broken palatine fang in the jaw, but so deep as to be only fairly discernible to the probe; the origin of the growth could not be seen, only inferred; by separating carefully the alveolus from the fang, the root, after some little trouble, was gotten from its bed. The little tumor proved to be an outgrowth of the periodontal membrane, and not an expression from the pulp; in character it was distinctly a fibroblastic thrombosis — it was, then, histologically to be classified as an epulis-serpentine tumor. It did not look like a growth from the periodontium, but rather as if its origin was in the crura posterior, and as if it had carried the membrane before it, somewhat like an inflammatory foci is made a tumor to a descending intestinal in an ebulus inguinal hernia. The removal of the fang brought the growth slowly away. Of course, no scraping or cutting of the parts was necessary; the growth was evidently an exudation of the dental aspect of the periodontium, and had in no way involved its alveolar association. No treatment of any kind outside of the removal of the tooth was employed. The patient remains perfectly ereward. This is the only growth of such a relation ever met with by the author.

CASE, FIG. 557. Epulis-keratotic Tumor.—Mrs. J., presented herself to her patient in the lower jaw, occupying the alveolar arch of the upper jaw, the growth extending from the lateral incisor tooth back to near the tuberculum. This tumor diminished in size during sleep, and increased at the time of any excitement which tended to unnerve circulation; sometimes it seemed like a solid body, at other times like a spongy mass; it was evidently erectile in its nature, the analogue of an ordinary tumor. It was an epulis-keratotic tumor.

Separating the growth from the gum, its association with the periodontium was plainly evident; the probe revealed involvement, as well, of the neighboring bone. An operation, which resulted in complete cure, was performed as