TREATMENT.—This aims to be alterative. Absence of knowledge of cause denies any but empirical practice. Attention is to be given to any systemic derangement that exists. Local remedies relate with iodine, iodide of potassium, the mercurials, sulphur, carbolic acid, zinc, chloral hydrate, bismuth, and similar preparations. Tar has been found serviceable. A mixture composed of equal parts of oil of cade, alcohol, and soft-soap is recommended. Hebra favors the use of iodine, alone or in combination with glycerine, painted over the part until a scab is formed. Cutting away of the surface by means of a curette is endorsed by many. Multiple scarification is recommended by Volkmann. Burning with the ordinary sun glass has been tried. The treatment employed by the author is the same as used by him in cancerous epithelioma, which see.

## CHAPTER XLV.

## EPITHELIOMA.

EPITHELIOMA as a term, when properly applied, is expressive of a variety of conditions: A cutaneous horn, an epidermic neoplasm, a subcutaneous scirrhoma are alike justly to be grouped under the single name. There are epitheliomata.

Epithelioma means relation with epithelial tissue,—that, and nothing more. Pathological signification of any special condition compels the prefix to the substantive of an adjective.

The present chapter deals with cancerous epithelioma.

By cancerous epithelioma is meant perversions, related with epithelial structure, arising out of the cancer vice.

Cancer is the terra incognita of surgery. A question of large clinical import relates with the origin of the disease. Is carcinoma primarily of local origin? Is a local manifestation simply an expression of a vice lying back of it? These questions wait solution. An English school contends for a primary constitutional meaning. The German, and an American school, the latter headed notably by the distinguished histologist, J. J. Woodward, of the Surgeon-General's Department at Washington, maintain the origin to be local. Accepting the latter authorities to be right, cure of cancer is found in immediate recognition and abortion of a local manifestation. The difference between the two views is separation between life and death,—a specific remaining undiscovered.

A cancer sore accepted as holding similar relation to the constitutional condition as is held by a chancre to systemic syphilis, treatment of the two becomes identical. Immediate recognition and destruction of a chancre is the abortion of syphilis; to possess a diagnostic acumen capable of distinguishing the incipiency of cancer is to hold in one's hands the means of cure.

Certain experiences of the author, had within the past twelve years, have introduced into his mind some doubt as to the humoral theory. He has cured epithelioma diagnosed to be cancerous. He is led to think that skin cancer, if taken in time, is to be aborted precisely as is syphilis.

Granting the success assumed: Are carcinoma and epithelial cancer the same disease? This dispute is gotten clear of in the exclusion which characterizes the diagnostic data of the chapter. All epitheliomata are not carcinoma. Some epitheliomata are necessarily carcinomatous, for the reason that exclusion shows they can be nothing else. Cancerous epithelioma is what has been successfully treated by a practice to be described.

The author of this work, in absence of better data, defines and treats as cancerous epithelioma every lesion upon the face that he cannot determine to be something else. (See *Tumors*.)

Whether primarily of local or of systemic expression, cancer, like syphilis and scrofulosis, is a vice of varying attributes, being, in some cases, mild and tractable, in others, strong and uncombatable.

An epithelioma, possessed of a history, classifies itself. In absence of history, or of likeness with known benign affections, a practitioner places, compulsorily, a disease before him with the neoplasms.

Accepting the reader as one able to distinguish a self-explainable condition, we proceed to a study of cancer seated in the skin of the face.

Viewing first the histogenesis, the idea is to be conveyed, that out of an impression made by the vice considered, abnormal epithelial evolution results. The vice intensifying, local expression enlarges; being in abeyance, change is at rest; being dead, cure takes the place of destruction.

Cancerous epithelioma seldom shows itself before middle life. It is more common to man than to woman. Its seat of predilection is the face, markedly the lower lip. Exceptionally it is met with in the superior lip. It is rarely seen multiple.

Three general forms of origin characterize the condition; these are, the superficial, the infiltrated, and the papillary. A form of epithelial cancer met with by the writer first showed itself as a series of delicate blebs in front of the ear, these being surrounded by a network of enlarged capillaries.

The superficial, or flat variety, presents itself as an irritation of the epiderm which assumes the form of scales, or of a grouping of papules, or of an inflamed sebaceous outlet.

The infiltrated variety is illustrated in the indurations begotten of chronic inflammation. Difference lies in absence of cause to explain the effusion. Another beginning of this diversity is in the form of indurated points, which later enlarge and coalesce until considerable surface is covered. This surface may be raised, but is more commonly as if bound and held down by the associated connective tissue.

The third form varies greatly, being in instances not dissimilar to the common wart, again presenting a cauliflower-like excrescence.

Commencing in the skin proper, epithelial cancer is apt to assume the papillary shape. Upon a mucous surface it is most commonly met with as an ulcer; at juncture of skin and mucous membrane, it is seen in either of these states.

All warts of vascular type, all pigmental and other nævi, all single and defined scaly patches, all persistent and unexplainable indurations, all cracks and fissures refusing to heal, are to be looked on with concern as of possible relation with the cancer vice.

In microscopic character epithelial cancer differs somewhat with location and stage of the disease. Primarily and characteristically, it is made up of

proliferation in epithelial cells, which cells range themselves in groups, and are found pushing their way into adjacent parts. These differ but little from the ordinary cell of the part implicated; when young they are round and succulent; when old they are caudate or elongated. Not infrequently they degenerate, undergoing a fatty metamorphosis.

The cut surface of an epithelial cancerous tumor shows a face not unlike that of a split turnip; it is hard, white, succulent.

An epithelial cancerous ulcer is fissured, vascular, and proliferating; its face is covered with giant granulations.

Epithelial cancer is not debarred by depth of surface, the signification lying in the presence of epithelium. Parts histologically connected with skin or mucous surfaces, wherever situated, as, for example, the liver, pancreas, frontal sinus, vermiform appendix, being attacked by cancer, would or would not show the epithelial expression according to tissue implicated. Parts histologically disconnected, as the subcutaneous connective tissue, find involvement in contiguity of structure.

Epithelial growths, as suggested by Billroth, "gland-like ingrowths," might be inferred not infrequently to diffuse into the spaces between the connective-tissue bundles, where lymph circulates, for there the structure offers least resistance. These are the tubes and cylinders which Koster thinks he has proved lie solely in the lymphatic vessels.

The epithelial pearls, described by histologists, are a result of a globular union of cells of the flat variety; their development being, most likely, as has been suggested by Billroth, from the increasing division of a number of conglomerate cells, the peripheral layer being flattened by pressure against not very distensible surrounding parts.

Treatment.—This, as will be inferred, is much at odds and ends. The humoral theory being that commonly accepted for the epithelial, as for all other forms of cancer, and nothing in the direction of a specific being known, practice has been purely empirical. To avoid doing harm has had more of signification in it than has hope of affording a cure. In every case in which the author is at all in doubt, the treatment adopted by him is that of a soothing nature. Cerate of oxide of zinc, thickened with oxalate of cerium, does no ill if no good; the combination is judiciously directed on occasion of a first interview. To feel one's way is the meaning of prescribing by exclusion; a placebo affords time for the making up of a conclusion.

Caustics hold prominent place in the practice of the day. If used at all, there is to be no half-way measure in the application. Nothing is so provocative of malignancy in the cancer vice as the application of a means not fully and completely radical as an extirpative destruction is concerned. Caustics used to destroy epithelial lesions are of various kinds; the Vienna paste is widely preferred; this is the potassa cum calce of the Pharmacopoeia. It is used by retaining an application in place from ten to twenty minutes, succeeding it with an emollient poultice. Landolfi's caustic is as follows:

R.-Bromin. ehlorid., 3 parts; Zinci, 2 parts; Antimon., 1 part; Pulv. rad. glycyrrh., 1 part.

Still another is called Fell's:

Fig. 458.

R.—Pulv. rad. sanguinar. Canaden., Zj; Zinci chloridi, Zij; Aquæ, fZij. A thick paste is formed.

A cauterant used by Dr. Mackey, of Edinburgh, consists of four parts of corrosive sublimate combined with thirty of glycerine. This makes a paint which is allowed to remain in contact with the part four hours; the application being followed by a warm water dressing; the eschar sloughs in from three to six days.

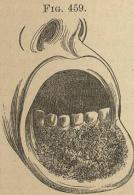
The author desires to express great personal fears of any and all cauterants; repeating, and laying decided stress on the injunction "to use with radical freedom or not use at all."

Epithelioma appearing in tumor-form upon, or in the substance of, the lower lip, invites removal by the knife in

proportion as a condition of concentration is expressed by hardness and non-infiltration. Fig. 458 shows such a tumor. In the instance illustrated, the lesion, together with almost the whole of the lip, was removed by a triangular-shaped section. Such section is the common manner of ablating

these growths; to promise anything, a wide margin is to be cut away.

Fig. 459 shows one aspect of a case having the following history: Col. W., merchant. Epithelioma involving, when first seen, lip, tongue, and cheeks,state hopeless. The disease in this instance



began as a minute tubercle just over the genial bodies of the inferior maxilla; little was thought about it, and it received attention only when found ulcerating, such attention consisting in the application of caustics. Aggravated by the treatment, the ulcer commenced rapidly to spread, defying, when too late understood, every means employed for its arrest. Shortly after coming under care of the author, the lip fell off in mass, the root of the tongue became indurated to such extent as to interfere with both respiration and degluti-

tion, and the sufferer, who had been a fine robust man, died from prostration.

In this instance the patient had, for many years, been in the habit of holding the tip of his eigar between the tongue and floor of the mouth. Many persons, however, so hold cigars without cancerous disease resulting. Fig. 460, being from life, has the following history: M. G., aged about

twenty-one, farmer by occupation, was sent for consultation by Dr. Edward Townsend, whose dental patient he was. Dr. T., while treating a bicuspid tooth, remarked Fig. 460.—View of Case at the neck a slight ulceration, which lesion, appearing of little consequence, commanded scarcely more than a passing thought. Attempting, however, at a later period, a cure, the obstinacy of the sore excited his suspicions, and, being unwilling to assume the trouble of

the case, he directed the patient to the writer's care. Examination made on first meeting the case exhibited a small ulcer on the left superior gum between the bicuspid teeth, in size about half as large as the silver three-cent piece, jagged, covered with a whitish gummy secretion,

AS FIRST SEEN.

and apparently superficial. The passage of a sharp probe through the centre of the ulcer revealed carious, softened, and periosteally denuded bone. Impressed with the character of the ulceration, yet unwilling while there might be an unrefuted doubt, however slight, to depress the patient by informing him of the nature of his disease, he was placed under ordinary treatment for a period of two weeks, at the end of which time, finding the experience in treatment to agree with that of Dr. Townsend, his condition was laid before him, immediate resection of the affected and adjoining parts being advised. Refusing to submit, the patient desired consultation, and in turn the advice of every prominent surgeon in the city was obtained. Opinions differing, he, by advice, submitted himself to various proposed remedies, being treated two weeks by one gentleman, eight weeks by a second, and nine by a third, the disease progressing, though slowly, all these weeks. At the end of this time, operation was again proposed and insisted on, the gentleman being informed of the necessarily increased magnitude of the portion of bone and soft parts to be removed; on his still refusing, further responsibility in the case was declined. The patient making the author a visit at a later period, the ulceration was found involving the Stenonian duct and extending from the symphysis to the tuberosity of the bone. At this visit he was told of the utter hopelessness of any operation for his relief, the disease being too extensive. From this time until his death, which happened in a few months, he was in the hands of different advertising impostors. Whether or not an early operation would have saved the person from his doom one may not say, but from a reasonable experience in the direction, it is to be asserted that without the performance of such proposed operation he had no possible chance.

Fig. 461 is from a photograph. It shows a patient under care of the author six months after commencement of an infiltrating epitheliomatous can-

Fig. 461.

cer; three months later death ensued from exhaustion. In this instance the first trouble from the disease was in stiffness of the lower lip; a very short time after papillary protuberances showed themselves; these, in instances, coalesced, forming the more prominent of the tumors seen. The infiltration extended rapidly to neighboring parts, the neck becoming indurated; a choked disk showed itself to ophthalmoscopic illumination. Vascularity was excessive. In this case the choked disk, and as well the entire condition, contra-

indicated the trial of any direct means of cure. The patient died without attempt being made to save him.

Treatment of cancerous epithelioma by injection of bromine is commended by Dr. Wynn Williams; a patient exhibited by this practitioner to the Obstetrical Society of London, was a person nearly the whole of whose lower lip had been removed for epithelioma eighteen months previously. The disease shortly appearing in the cicatrix, the growth was successfully treated by two injections of bromine, twenty drops to a drachm of spirit. There was later no appearance of any return.

Injections of glacial acetic acid and of Monsel's solution of iron, both of which have been highly recommended, have been submitted by the author to exhaustive tests. No good results ensued.

Treatment by the knife consists in complete ablation of the diseased mass. Unless an extirpation can be thorough, there is no excuse for attempting such mode of treatment.

In the numberless cases of epithelioma where the most superficial observer would recognize the impropriety of attempt at cure by operation, it becomes a necessity to support the strength and contribute to the comfort of the patient. Here medicines found most antagonistic to the disease are by all means indicated. Of such local means the author would highly recommend the daily use, by means of an atomizer, of the following combination:

R.—Glycerinæ, Zj; Acidi carbolici, Zj; Sodæ sulphitis, Zj; Aquæ, Zx. M.

Not only will this preparation be found to afford much relief from pain, and to be softening and soothing, but it has seemed to possess marked influence in retarding the progress of the disease. It may also be administered internally

in teaspoonful doses. The American drug hydrastis canadensis, used in lotion, is highly commended by Dr. Edwin Payne, of London, for its painlessness and for its power in keeping the surface in a more healthy condition and free from offensive odor. The strength used is a drachm of the tincture to eight ounces of water. In this connection phénol sodique is to be mentioned, the author has tried no remedy that seems more grateful to a patient: it is not only an obtunder, but the most reliable of disinfectants. It is employed diluted pro renata with water.

Vallet's mass, administered in doses of from five to ten grains a day, is highly recommended by Professor H. H. Smith. One case, as an example, is mentioned by this surgeon, where, having been consulted with a view to operating, and having declined on account of the rapid advance of the disease, he suggested the use of the medicine, conjoined with the application of the powdered carbonate to the sore, and the patient lived eight years without the disease having made any very great progress.

Justamond, of London, also favored the internal use of iron, and was in the habit of giving from sixty to one hundred and twenty grains of the ammonio-chloride a day. Dr. Carmichael, of Dublin, expressed himself as having derived much benefit from washing the ulcerations with a solution of sulphate of iron.

Chloride of zinc in solution is, in this direction, a favorite preparation: the power of this salt to arrest phagedenic action is remarkable: it is peculiarly alterative. Judiciously applied to any indolent, irritable, or bad ulcer, it will be found to influence markedly to a change for the better.

Concerning the use of this agent in cancer, we have many commendations, particularly from European surgeons; but, as can be very readily apprehended, nowhere in the range of its application is more judgment required for a judicious employment than here, for it is a cauterant, a stimulant, an antiseptic, and an alterative. Dr. Zuerine, of Vienna, relates a case of cancerous ulceration of the septum nasi which threatened to destroy the whole nose; one grain and a half of the chloride of zinc, he says, were dissolved in one ounce of distilled water, and, the scab being removed, the sore was pencilled over several times a day with the solution; at the end of a fortnight a healthy granulating surface was found underneath the thick crust which covered the sore, and this being occasionally removed, and the solution reapplied, it cicatrized in five weeks.

Mr. Tuson has published some cases to show the value of certain preparations of chlorine in cancerous affections. In one which he refers to there was an extensive cancerous disease of the right breast and neck, which was treated unsuccessfully for a long time, till a paste was applied, made of one part of chloride of zinc to three of flour; this was well mixed, and moistened with water, and then applied over the ulcerated part. The zinc was also given internally; half a grain was ordered in a wineglassful of caraway-water every morning. The chloride of zinc paste was applied again, and when the slough

separated, the ulcerated surface healed kindly. The cancerous deposition continued for some time, and the dose of the metal was increased to three-quarters of a grain and continued for three months. The improvement, although very striking, was not permanent, as the patient suffered a relapse which ended fatally. The case, however, was sufficient to show that the treatment had made considerable impression on the disease, and especially in healing the open cancer, which Mr. Tuson had found to be the result in several other cases.

The great suffering associated with carcinoma makes necessary the free use of opiates, both locally and internally. Stramonium, belladonna, aconite, opium and its preparations, hamamelis, are highly recommended. As much as twenty grains of sulphate of morphia have been administered during the course of a single twenty-four hours in certain rare cases. Injection by the subcutaneous method, where morphia is to be long continued, is now generally resorted to. Batley's solution answers well for this manner of use. For continuous stomachic administration of the opiate preparations, preference is to be given to the bi-meconate of morphia; the officinal strength of this medicine, prepared in solution, is that of laudanum, twenty-five drops representing one grain of opium.

A complication sometimes occurring with epithelioma about the mouth is the supervention of erysipelas. A peculiarity of these cases is that the inflammation does not exhibit its specific complexion, but a patient is found to look as if in a few hours his disease had made more progress than before in months, or perhaps in years. The best treatment the author has found for such a complication consists in the use of what on a previous page has been alluded to as almost a specific, the proportions being varied to suit cases:

B.—Tincturæ ferri chloridi, Zj;
Quiniæ sulphatis, Zj;
Tincturæ cinchonæ, Zij to Zss. M.
S.—To be brushed over the parts every hour.

Another complication occasionally met with is the existence of salivation. The author once had as a patient a lady who was compelled to keep a washbowl constantly upon her lap; the water literally flowed from her mouth. (See *Dribbling*.)

In doubtful cases, as will bear to be repeated, great caution is demanded that a practitioner do not more harm than good. A safe rule is to do nothing unless one knows exactly what to do. More patients have the fatal termination accelerated than retarded by treatment of epithelial cancer. That which is the treatment of lupus erythematosus in its milder aspects is good practice to pursue in doubtful cases. The affected part may be sprinkled with iodized starch, ten grains of iodine to an ounce of finely pulverized starch. Another most excellent powder is composed of subnitrate of bismuth, calomel, and oxide of zinc in equal parts. Still another is found in

lycopodium. Tar and zinc ointments in like proportions constitute an excellent application. Sulphur proves at times serviceable. Iodide of potassium and iodine, of each half a scruple, mixed up with a drachm of glycerine, is highly commended by Anderson. Duhring, in the treatment of lupus erythematosus, thinks favorably of an ointment made by mixing up with an ounce of simple cerate from a scruple to a drachm of chrysophanic or pyrogallic acid.

Treatment of strictly surface cancer may try the method of erosion by the curette as practised with much satisfaction in surface lupus; recommended for this last by Auspitz, of Germany, and by Wigglesworth, of our own country.

The author concludes the chapter by reserving a place of prominent signification for a treatment to which special attention is directed,—a treatment which, in every individual instance where he has found the operation practicable, has resulted in cure. It is desired to lay stress on the suggestion as being the most promising means of treatment yet tried. The practice is founded on an inferred catalysis resulting from bringing in contact and vital apposition tissues differently related. That is to say, a patient laboring under epithelial cancer of the face is to have the disease thoroughly and widely removed by the knife, and the seat of the ablated part occupied by structure brought from neighboring or distant parts.

EXAMPLES.—Fig. 462 exhibits an operation practised by the writer for the relief of an epithelial ulceration involving the full lower eyelid and a



limited portion of the upper. The study of this operation illustrates a class in the direction. First, as seen in the diagram, the diseased structure is fully removed through incision associated with the uninvolved surrounding parts.

Second, the hemorrhage being entirely controlled, a flap to replace the lost part was made, as shown in the inferior lines; this flap being raised was carried upward, the convex portion being associated with the concave break resulting from the section of the upper lid,—the slightly concave portion representing the superior line of the lower lid. The triangular portion, seen in the diagram to exist at the side of the ala between the two incisions, was next dissected from its apex toward its base, and being directed below what, in the diagram, is seen to be the inferior flap, was thus brought into relation with healthier influences, while a similar good was secured for the new eyelid, in making it of tissue which had not been in immediate juxtaposition with the diseased part removed.

The position of this cancer is seen to be of most unpromising relation.

The operation was done in 1869. There has been no return.

Fig. 463.



Flap operation in treatment of carcinoma.

In 1875 an epithelioma situated on the side of the nose of a nephew of the gentleman whose case is referred to above, was treated by a flap transferred from the hair-line of the forehead. Cure remains complete.

An operation of extensive transplantation was made by the author at the Hospital of Oral Surgery, where the disease involved both eyelids, the contents of the orbit, including the eye, the nasal arch, and the cribriform plate of the ethmoid bone, all the parts named being removed, and their places occupied by a flap taken from over the scapula, its pedicle being at the mastoid process of the os temporis. Being fitted into its new place, this pedicle

was crucially incised where it overlay the circumference of the orbit, and the flaps thus secured were turned into this cavity. Unfortunately, some



sloughing occurred which interfered with the æsthetic results of the performance; but aside from this a good was secured which delayed the progress of the disease for over a year.

Fig. 465.



This case was not a practicable one as to prospect of permanent cure, the