

## Surgery.

### THE DIAGNOSIS OF EPITHELIOMA OF THE TONGUE.

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Most surgeons will admit that, if operations for the removal of epithelioma of the tongue are to be undertaken with any prospect of permanent success, they should be performed at the earliest possible period of the disease, while yet but a small segment of the tongue is affected and the lymphatic glands are sound. Most surgeons will agree, therefore, that a certain and early diagnosis of epithelioma of the tongue is exceedingly to be desired. No means, however, are described by which a certain and early diagnosis can be effected. The characters which chiefly are relied on are, the sinuous outline of the epithelial ulcer; its raised, everted, nodular borders; its glazed, or foul and ragged surface; and the surrounding induration. But every surgeon knows how often one or the other of these characters is absent, and how often many of them are simulated in a tuberculous or syphilitic ulcer, and how difficult the diagnosis of certain cases is, not merely in their early stages, but when they have existed many months. Mr. T. Smith's case, reported from the St. Bartholomew's Hospital consultations in the last volume of the JOURNAL (1881, vol. ii, page 1,015), affords an admirable illustration of the difficulty of distinguishing between epithelioma and tertiary syphilis of the tongue. It shows, too, the disastrous result which follows the practice of deferring an operation until the effect of anti-syphilitic remedies has been observed.

This watching of malignant ulcers, and studying the effect of remedies upon them, is so common, that a surgeon, so far from being blamed for following it until the disease is too far developed for operation, would more probably be blamed for adopting the opposite principle, and freely cutting out a disease of doubtful nature. It is at present almost impossible to make a certain diagnosis of all forms of malignant ulcers in all parts of the body;

but in the tongue I believe it is possible, and not extremely difficult.

The structures of which epithelioma is composed are very characteristic, and lie so close to the surface that they can easily be procured for examination by scraping the surface of the ulcer with a blunt knife or Volkmann's spoon, or any similar instrument. In addition to pus, and blood-corpuscles, *débris*, and microzymes, numerous epithelial cells are always present, but differ widely from the normal epithelium of the tongue. Many of them are smaller than the normal cells; others are much larger; the nuclei of both kinds are several times larger than the normal nuclei. All the cells are granular; some of them are clouded and opaque with granular matter. Some contain large round or oval spaces, clear and well defined. Many of them have more than a single nucleus, and some contain smaller cells with nuclei and nucleoli. The shape of these abnormal cells varies as much as does their size; some are round, some oval, some quadrangular or polygonal, some tapering at one end, and some at both ends. With these distorted and fantastic cells, normal epithelium may be mingled; but the normal cells are few in number, while the diseased cells are many.

Sometimes, and not unfrequently, even more characteristic structures than those described are found, *i. e.*, cell-nests, or portions of cell-nests.

I first applied this method of examination in the case of an epithelioma of the tongue in a young man, where the diagnosis was difficult, partly on account of the patient's age (29). The microscopic characters of a scraping dispelled all doubt of the nature of the disease. I have since used it in several difficult cases with the greatest satisfaction. In order to prove that the test is reliable, I have made sections after removal of the epitheliomata which have been scraped and examined before removal, and have thus been sure that the diagnosis was correct. I have also examined scrapings taken from other kinds of ulcers of the tongue, and have never found structures resembling those of epithelioma. Pus, and blood, and granulation-corpuscles are present in large quantities. Micrococcus-masses, *débris*,