THE ALVEOLAR ROUTE OF OPERATING UPON THE MAXILLARY SINUS.

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This article is prompted by the article of Dr. Walter A. Wells, in the December number of this journal. This gentleman is evidently so prejudiced against the alveolar operation that he fails to give it even scant justice.

Dr. Wells considers the operation through the alveolus unjustified for many reasons, but the natural inference is because he considers it an operation which does not cure. He seems to think that it is confined to making an opening into the antrum through a tooth cavity, and putting in a drainage tube or plug to maintain the patency of the opening; that the antrum can not be curetted through the opening, nor satisfactorily treated; that the opening will close before suppuration has ceased, unless kept open by a tube. He also objects to the communication with the mouth, because of the possibilities of food getting into the antrum. In short, he classes this operation as "tentative and conservative," and that it "has no justification whatsoever."

I desire to take issue with every objection he has made to the alveolar operation. I do not desire to criticise the operation advocated by Dr. Wells. It is a well known and meritorious procedure. His method of making an opening through the naso-antral wall is the only part, I presume, for which he claims originality. His cutting-rasp-trocar is an ingenious instrument. I shall certainly get one and give it a trial, as I fully realize that the nasal route is in some cases more satisfactory than the alveolar route; it involves the sacrifice, however, of one-half of the inferior turbinated body. It mutilates, to a certain extent, the nasal interior, and in my opinion is not a justifiable procedure as a primary operation, if the alveolar opening can be made without the sacrifice of a good tooth.

Now for the alveolar operation, as I perform it. I always select one of three tooth sockets, the second bicuspid or the first or second molar. If one of these teeth is out, this space is used. If no one of them is out, I select the one most diseased. The opening into the antrum should be made as large as the space between the teeth will permit, unless several teeth are out. In this event, the opening

should have an all round diameter of three-eighths of an inch. The primary opening should be made with a quarter-inch trephine, and this opening enlarged with a burr. Before enlarging the opening with the burr, it is well to clear the antrum of all its pus by springing. If only one tooth is out the opening should be enlarged laterally until the opening of three-eighths of an inch in its greatest diameter is made. Its other diameter is governed by the distance between the teeth. The antrum should now be freed of all blood by syringing or irrigation, then cocain and adrenalin springed into it. A Miles' curette is now introduced, with its shank so bent that all the walls of the antrum can be reached and the cavity thoroughly curetted. Springing or irrigation is again practised until all debris is washed away, when the opening is packed with gauze and the patient is then sent to a dentist, that he may take an impression of the part and make for him a small saddle-shaped plate or bridge, which fits over the alveolar process, and covers the hole, and clasps the teeth in front and behind for its support. If the patient is wearing a plate which covers the part, this is all that is required. This saddle-bridge can be made of rubber, gold, silver or aluminum. It is easily removed and replaced by the patient. Until the dentist has made this bridge, I see the patient daily and syringe out the cavity with some antiseptic wash, and repack the opening with gauze. After he gets the bridge I cauterize the whole interior of the antrum with pure carbolic acid applied with cotton wound upon cotton carriers, suitably bent to reach the antral walls, and then immediately neutralize the acid by syringing alcohol into the antrum. The patient is now taught how to cleanse the cavity. I see him at weekly intervals and apply the carbolic acid. The opening will begin to grow so small by the third week that it must be enlarged. This is very simple. Cocaine is applied in the opening as well as adrenaline, and with a cataract knife the bony opening is reamed out. A collar of tissue comes away quite easily if the precaution is taken to introduce the point of the knife well up into the antrum. In this manner the opening can be maintained large enough for all purposes of treatment until the case is well. I have not had a single case in the last ten years which has exceeded four months' treatment, and very few go beyond six weeks; many of these cases have had chronic empyema of the antrum for years. Many of these antra have contained large amounts of granulation tissue, and some of them dead bone. I had all kinds of trouble as long as I used tubes. I do not believe the alveolar operation will ever be popular as long as tubes are used. I am satisfied that their use has been largely responsible

for the disfavor in which many hold this operation. They interfere with perfect drainage and they promote the formation of granulation tissue in the antrum about the end of the tube, which may keep the disease going indefinitely. In short, they act as foreign bodies, and as a splendid canal through which food and mouth secretions pass to the antrum. I discontinued using them ten years ago and at once my cases began to get well in a much shorter time than ever before.

When I began using carbolic acid another gain was made. So far as the douching agents are concerned, I am indifferent, so long as they cleanse the part. This operation with me is successful. If it were not I should not continue to use it. The disease rarely recurs. When it does, even though the hole is firmly closed with tissue, I ream it out with a cataract knife, have them wear the bridge again, and proceed with the carbolic acid, cleansing and curetting if necessary. In a few weeks they are well. I object to hearing this operation through the alveolus slandered. There are, no doubt, more radical operations, but in my opinion they are not indicated unless the patient's teeth are all sound. I am not sure but that I should prefer to lose one of my teeth rather than one-half of my interior turbinate.

Majestic Building.

Anosmia, Parosmia and Parageusi. C. ZIEM. *Monatschr. f. Ohrenh.*, Berlin, Sept., 1904.

The author describes the disturbances of taste and smell associated with suppuration in the maxillary sinus, and recites histories of cases in which these disturbances were relieved when the sinus affection was treated.

YANKAUER.