second molars the neuralgia disappeared. I have lately seen the lady, and she is still free from pain. For the last three years she has been under the treatment of an aurist, to whom I sent the skiagrams and a note of the treatment adopted, and he expressed his approval to me.

Two Cases of Suppurating Dental Cysts invading the Maxillary Antrum.

By Herbert Tilley, F.R.C.S.

Case I.—Mrs. B. W., aged 27, consulted me on January 26, 1910, complaining of "neuralgia of the left cheek" which had lasted for six weeks. She said that a diseased tooth had been "filled," but that the filling had been removed without any relief from the neuralgia, and that during the period stated she had occasionally noticed an unpleasant nasal discharge from the left nostril. Transillumination showed that the left antrum was dark, but on exploration of the sinus through the nose by means of a trocar and cannula passed through the inferior meatus it was found that no fluid could be made to return from the nose. It was therefore obvious that the cannula was not in the antral cavity proper, or, if it were, that the natural opening of the antrum into the nose was closed—a rare condition. On January 28, assisted by Mr. Betts, I removed the anterior two-thirds of the left inferior turbinal and opened the antrum by a large opening in the canine fossa, when a quantity of foul pus escaped. The cavity opened was the size of a normal adult antrum; it was lined with red, vascular granulations, and proved to be a large bony-walled cyst which had completely filled and moulded itself to the antral cavity. The cyst wall was removed piecemeal through the opening in the canine fossa, and a large opening was then made into the nose by the removal of the greater part of the inner antral wall. The bucco-antral wound was sutured by two interrupted horse-hair stitches, and the patient made an uninterrupted and rapid recovery.

Case II.—Major K., aged 35, was sent to me on February 2, 1910, because of a "puffy swelling under the lower part of the right cheek" from which a discharge of pus into the mouth had taken place for at least two months. The second upper right bicuspid had been removed, but the swelling over the alveolus remained and varied in size according to the freedom with which pus discharged from the alveolar fistula.

Aching pain in the right cheek was more or less constant. Transillumination showed that the right antrum was dark, but here again, as in Case I, it was impossible to obtain a return of fluid when intranasal irrigation of the antrum was practised. On February 9 the same operative procedure was carried out as in Case I, and with an equally successful result.

The cases are interesting in that they illustrate how large these cysts may become, and they may afford an explanation of the persistence of some alveolar fistulæ even when the diseased tooth has been removed.

From the nasal surgeon's point of view the prognosis in each patient was interesting, because it was quite obvious that when the antrum was perforated and no fluid could be injected, one must be in a closed cavity such as a cyst, or, if in the true antrum, that its natural "ostium" was not patent—a rare condition. For such reasons a suppurating cyst was diagnosed in each case. Equally important is the question of treatment. To open the cysts from the alveolar aspect, curette their lining membrane, and to pack with gauze until the cavity is obliterated by granulation tissue is scarcely fair to the patient, and is certainly meddlesome interference on the part of the surgeon; and yet there are still text-books which advise this as the correct treatment.

One cannot conceive that either of these bony-walled cysts would have ever become obliterated, but it is easy to imagine what a constant and wearisome nuisance it would have been to the patients who, once or twice daily for month after month, would be compelled to pack these suppurating cavities every day, and whose meals would possibly have been flavoured by "sauce iodoformée."

By removing the cyst wall entirely, making a large counter-opening into the nose, and suturing the bucco-antral mucous membrane, the patient is practically well in a week, and for purposes of cleanliness need only irrigate the nose twice daily for the following two or three weeks.

Mr. HERBERT TILLEY exhibited a series of diagrams by which he explained the method of operation, and added that on the preceding Thursday morning a patient came to his clinic with a dental cyst which had been packed for six months; one could still pass a probe 1½ in. into it. He thought it would just illustrate the inefficiency of that method of treatment if he brought the patient to the meeting for members to see.

The condition of the lady was exhibited to the members.

As far as one could see, the cyst would be there for another six months or even six years. It was really a simple treatment to give the patient a general anæsthetic, remove the anterior and inner antral walls, and thus induce a rapid and complete recovery.

DISCUSSION.

In reply to the President, Mr. TILLEY said that his experience of the success of the operation in the treatment of chronic suppuration had led him to employ the same method in dealing with large suppurating dental cysts. The diagrams which he showed were made to illustrate the radical treatment of chronic antral empyema by freely draining the nose, but the same treatment was efficient for a *large* cyst which also filled the antrum. In reply to Mr. J. F. Colyer, he said that one of the patients had noticed an unpleasant smell, but he thought the pus had escaped from the large cyst into the antrum and had been discharged into the nose. In the other case there was no communication with the antrum at all; it was merely a very large cyst filling that sinus. It occurred to him to remove the whole bony wall and leave the antrum intact, making a counter-opening into the nose for the sake of securing free and permanent drainage. In reply to Mr. James, he said that he was not conversant with the different types of dental cysts, and could only say that the two he had recorded appeared to him to be alike. In the first case he thought when he gained access to the cyst that he was in the antrum, but while mopping it out he saw the whole surface move. The cyst was as large as a good-sized walnut and consisted of a very thin bony wall. Those who had studied this subject in the museum of the Royal College of Surgeons would have seen there a beautiful dental cyst almost completely filling the antrum, and the cysts he had referred to seemed identical with that. On the outer surface of the cyst at one point was a polypus which seemed identical with those met with in the nose.

Mr. SCHELLING said, in regard to the first case mentioned by Mr. Tilley, he believed the patient was a patient of his partner, Mr. Betts. Mr. Betts had filled a tooth, but the patient came back with the pain not at all relieved. He believed Mr. Betts killed the pulp in the molar. He looked the matter up, and saw that it had been done thoroughly according to the book. He took out an old filling from the next tooth and cleared out the palatine root. Being short of time he could not do anything with the buccal roots, and just put a dressing in and told the patient to come and see Mr. Betts in a few days. On that occasion he believed Mr. Betts opened up in the direction of the anterior buccal root and came upon the canal, from which a large quantity of fluid issued. He believed Mr. Betts said that he soaked something like twenty or thirty large plugs of cotton wool with the fluid from the cavity, but whether that collection of pus was in the antrum or not he did not know.

Mr. J. F. COLYER wished to put in a word for the treatment from the mouth of dental cysts invading the antrum. At the Royal Dental Hospital a very fair number of such cysts were seen, and where the cyst invaded the antrum most excellent results could be obtained by opening the cyst wall, removing it very freely, and making a surface draining into the mouth—just as

easily, in fact, as a surface drain could be made into the nose. The whole secret consisted of entirely removing the cyst wall and draining into the mouth so as to leave a self-cleansing surface.

The PRESIDENT (Mr. Hern) thought there was a distinct advantage in draining an antrum or a suppurating cyst into the nose instead of into the mouth, because the more free the mouth could be kept from pus the better.

A Case of Painful Attrition.

By WILLIAM RUSHTON, L.D.S.

ATTRITION, or the wearing down of the masticating surfaces of teeth, is a condition which usually gives rise to so little discomfort that most of the text-books ignore it, or only mention it casually. The cases we usually see are those in which, the molars having been lost, mastication is performed by the anterior teeth, which consequently become much worn down. We also occasionally find molars the enamel of which has partially or totally disappeared, and the dentine, where exposed, gives more or less discomfort on mastication. There are also cases—chiefly in the temporary dentition—where active caries has by some means become arrested, and where the dentine becomes black, polished and worn down to the gum level, without apparently causing any discomfort to the patient. (Models of child's teeth passed round.) Where the condition gives pain it is usually treated by the application of silver nitrate, by filling, crowning, or by supplying an artificial denture to relieve the wear of the natural teeth. I once saw an elderly American gentleman who had had every tooth in his head encased in gold. The treatment was effectual, but it imparted a Midas-like expression to his smile which was far from pleasing.

The case I bring before you to-night is remarkable for the large amount of molar attrition, especially in the mandible, for the comparative youth of the individual, and for the great amount of suffering caused. The subject is a dentist, an old fellow-student of my own, aged 41. He is an Armenian, practising in Syria. I pass round the models of his teeth, which he has sent me, which show very clearly the manner in which his molars are worn down. He complains of great pain, especially in the lower molars on mastication. They are also very sensitive to sweets, acids, and to thermal changes. The teeth are