PRESERVATION OF THE ANTERIOR WALL IN THE EXTERNAL FRONTAL SINUS OPERATION.*

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External frontal sinus operations have been rather numerous. The older ones consisted in the removal of more or less of the anterior wall, with or without enlargement of the fronto-nasal canal. In some instances the sinus was packed and healing by granulation established. Instead of removing the anterior wall an osteoplastic flap has been used by some operators.

All of these operations are open to the objection that the ethmoidal cells are practically ignored, and re-infection may occur, or more or less deformity may result. Where the osteoplastic flap has been employed the deformity is obviated.

It remained for Killian to devise the most satisfactory external operation for frontal sinus suppuration. By means of this procedure the ethmoid cells are obliterated, a large permanent opening established into the nose and all debris removed from the sinus.

A varying degree of deformity results from the removal of the anterior wall in the Killian operation and it has been suggested by a few operators that the anterior wall be preserved, while the operation below the arch is done precisely as Killian recommends.

The question now arises as to whether the sinus can be sufficiently curetted from below. This depends upon its size and contour. I am convinced after investigations on the cadaver as well as on the living that it is by no means always necessary to remove the anterior wall to satisfactorily curette the sinus.

In suppuration of the sphenoidal sinus and antrum it must be admitted that most cases recover upon establishing thorough drainage and ventilation and the question of curettage must depend upon the condition of the membrane, the presence of granulations and polypi. The indiscriminate removal of the mucous membrane is to be deprecated. These facts obtain also in regard to the frontal sinus.

It seems to us that the lower portion of the Killian operation should be first performed, preserving the anterior wall unless it is found impossible to satisfactorily remove the debris from the sinus from below.

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Of course the X-ray photograph should be used previous to operation to determine the size and contour of the sinus. We have been able to find but few cases reported in which any effort had been made to preserve the anterior wall.

We have performed six external operations in which the anterior wall has been preserved and the procedure below the arch was a typical Killian. It was our intention in case this should fail to cure to re-operate and remove the anterior wall, but we did not find this necessary. The thoroughness of the resection below the arch is in no way impaired by keeping the anterior wall of the sinus intact.

There are three prime objects in performing the frontal sinus operation: 1. To remove all diseased tissue. 2. To establish permanent drainage. 3. To insure ventilation of the cavity.

The lower operation gives drainage and ventilation without question. The debatable point is whether the debris can be removed sufficiently to insure cure. Even with the removal of the anterior wall it is sometimes impossible to remove every vestige of granulation-tissue, but this quickly shrivels under the influence of air.

It cannot be doubted but that the removal of the anterior wall is necessary in some cases, but certainly less often than is now generally done. It is an advantage to have as large an opening into the nose as possible, and it is necessary to prevent excessive granulations.

Many of the indifferent results in the Killian operation are no doubt due to lack of sufficient after-treatment. In some cases gauze should be packed intra-nasally into the opening of the sinus and nitrate of silver occasionally applied as conditions demand.

We will not burden you with a detail of cases, but suffice it to say that the results in these six cases have been so satisfactory that we feel warranted to continue in our effort to preserve the anterior wall.

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Headache and Nasal Obstruction. CHAVANNE. *Arch. internat. de Laryngol. d'Otol. et de Rhinol.*, Jan., 1911.

Report of a case in which the headache entirely disappeared after cauterizing the nose to relieve a bilateral hypertrophic rhinitis.

Ed.