

on both sides to conversation. As regards the tuning-fork tests, perception for the lower tones up to the small octave was completely absent, and from thence to the high tones there was very considerable depreciation; bone-conduction was present. Periodical attacks of giddiness also occurred, which, though at first slight, had in the last three weeks become almost unbearable. No response whatever was obtained by the caloric tests, but there was a prompt reaction to both rotation and galvanism. The condition was the same on both sides. The patient had declined any operation, but had been kept under observation for some two years, during which time the hearing had become worse still, and nystagmus could now quite easily be provoked with the slightest movement of the head.

After referring to some other somewhat similar cases, Neumann remarked that for this extraordinary group of symptoms he was only able to offer, as a mere suggestion, by way of explanation, some recurrent alterations in the consistency of the fluid contents of the labyrinth, such as might, for instance, be the result of inflammation or hæmorrhage or some other, as yet unknown, conditions. As, however, time did not then permit, he would defer any further remarks as to the pathology of these cases till the next meeting.

ALEX. R. TWEEDIE (*trans.*).

Abstracts.

NOSE.

Baumgarten, Egmont (Budapest).—*Impairment of Vision due to Intra-nasal Conditions.* "Monats. f. Ohrenheilk.," Year 44, No. 9.

The report of the following cases forms the subject of this article, preceded by a brief introduction.

A woman, aged sixty, was referred from the eye department with the story that her sight had been failing for two weeks and that now she could not distinguish people in the street. Right eye, myopic vision $\frac{5}{60}$, improved with concave glasses to $\frac{5}{30}$. Left eye vision, $\frac{1}{70}$, chronic papillitis passing on to atrophy. Intra-nasal examination: The left middle turbinal was enlarged towards its hinder portion and almost engaged the septum. Apart from this no abnormality was detected.

Under cocaine the sphenoidal sinus could be reached by displacing the left middle turbinate outwards and its anterior wall broken down: although no pus or even serous fluid was found the patient at once stated she could see better. On account of this improvement and with a view to affording permanent relief the left middle turbinal was removed. The next day the patient reported that her sight was still better and that she

could then recognise people. Vision in both eyes $\frac{5}{30}$. The sinus was kept open a short while and the oculist reported that the papillitis had improved, and that she could read "No. 13" with glasses corresponding to her presbyopia.

The author considered that the causal relation between the nose and impairment of vision was established by the result of this treatment in spite of the fact that neither pus nor serous fluid was found in the sphenoidal sinus, and concludes that relief of some "circulatory disturbances" must be the explanation.

Snellen and Quix in Utrecht had reported on seven very similar cases which had come under their notice in the last two years.

A second case was that of a woman, who twenty-four hours before had become blind in the right eye, the fundus of which, however, showed no departure from the normal. A very slight enlargement of the middle turbinal was the only noteworthy point in the intra-nasal examination, but in the light of the previous case this was removed, and as no improvement in the vision then occurred the sphenoidal sinus was opened. No pus or serous fluid was found, but the mucous membrane felt very swollen to the probe. The third day after the patient could count fingers, but a papillitis had developed. She, however, was so content with the improvement that she declined any further treatment for the present.

Yet another similar case referred to a girl, aged twenty, who four months before had suffered with severe headache, and within three days had completely lost the sight in the left eye. She could bear no one near her and every known remedy was tried without avail. No disease of the nerves could be found, and the case was sent on by the oculist to the author with the report: "The right eye intact; myopic astigmatism. The left eye showed a particularly pale disc without signs of general papillitis; pure pressure atrophy. Irregular central scotoma with a definite boundary in which certain objects could still be recognised. Marked divergent strabismus."

The only point worthy of note in the nose was an enlargement of the posterior end of the left middle turbinal which engaged the septum. This, on account of the severe and persistent headache, was removed. As no improvement had followed this procedure by the next day the sphenoidal sinus was laid open. No pathological contents were found but the sinus was very small, and its mucous membrane so swollen that a portion of it could be easily removed. The headache was much improved the day after, had completely disappeared in five days, and the patient stated that the "darkness" in the left eye was clearing up. The strabismus was also considerably improved. Within a month the oculist stated the scotoma was much smaller but the fundus appearances remained the same.

For two months the patient was continually under observation. Headache occurred from time to time, but always less in severity, and on each occasion the removal of granulations from the stump of the turbinal or from the sinus effected an immediate relief. She also reported that her vision improved from day to day, and she could now walk in the street with the right eye closed.

She was sent home and returned in about six weeks very pleased with a further return of sight, looked exceedingly well, and had had scarcely any headache. A slight recurrence of these symptoms, however, necessitated a repetition of the above treatment, and means were also adopted to ensure against granulations re-forming by a radical operation on the ethmoidal cells and enlarging the opening into the sphenoid sinus. Five

months after the original operation the oculist reported that the scotoma was now for colour only and that she could count fingers at one metre. No further improvement took place, probably because this was an old amblyopic eye. Vision in the right eye $\frac{5}{30}$; improved by 3-5 D. to $\frac{5}{15}$. Strabismus almost disappeared. Headache on the affected side gone, but still some referred to the other side. The patient attended a short while longer. At the time of writing she could distinguish a red cross. (Four perimetrical charts illustrate this case.)

From the results of these operations Baumgarten submits that it is always worth while to carry out such treatment in both acute and chronic cases, even if no definite objective reason can be found in the nose, affections of the other sinuses being of course previously excluded as far as possible.

A fourth case relates to a woman, aged forty, whose vision in the right eye had progressively become worse during the last two months, and was associated for the last week with severe headache. Right eye, vision $\frac{5}{30}$; left eye, $\frac{5}{7}$. Subacute papillitis of the right eye. Visual field normal, even for colours.

Examination of the Nose.—Enlargement of the hinder ends of both middle turbinals, which almost engaged the septum and felt like bone. This enlargement on the right side was removed under cocaine, and found to consist of an extensive bony cyst, the interior of which contained soft granulations. When the patient had recovered from the operation she was taken at once to the oculist, who found that the vision could then be improved with 2 D. to $\frac{5}{15}$. The next day the headache had gone, and the vision still further improved, but in the meantime a papillitis of the left eye had appeared—a condition not very surprising when the result of the intra-nasal inspection on that side is recalled. As, however, the sight was unaffected, and no headache supervened, operation on this side was postponed, and as this treatment alone effected all that was necessary the sphenoid sinus was not opened. The author concludes from this case that an enlargement of the turbinal may thus be the cause of papillitis.

The fifth case was a man, aged twenty-four, sent to the author with an acute papillitis of the right (? left) eye; vision normal; an absolute paracentral scotoma varying between 10° and 20° . Patient said he could see well, but that for some weeks it appeared as if he saw everything through a cloud. At times he had had severe left-sided headache.

As the posterior end of the left middle turbinal was enlarged it was removed, and on the posterior ethmoidal cells being laid open in order to gain sufficient space they were found to be filled with granulations. Immediately the patient said the headache had ceased, and that it seemed as if the veil before the eye had been taken away. No remains of the scotoma could be detected after a few days, and the vision a little later was normal, but as he still had intermittent attacks of headache he was told that if these became severe he was to report himself so that the sphenoidal sinus could then be opened.

Case 6 was a man, aged thirty-four, who had partially lost the sight of the right eye a long while. The field for white was concentrically narrowed; central scotoma for red and green. Vision: right, can count fingers at $1\frac{1}{2}$ metres; left, $\frac{5}{7}$. A slight engorgement of the veins was seen in the right fundus. Nothing abnormal was seen after cocainising the nose until the right middle turbinal was pressed outwards, when a drop of pus was observed on the lower part of the anterior wall of the sphenoidal sinus, which reappeared when swabbed away. For this reason the sinus was opened and some thick pus evacuated. After the operation

the vision improved to $\frac{5}{70}$, and in sixteen days to $\frac{5}{70}$. The scotoma for white almost disappeared, but persisted for colours.

In the last instance given, a woman, aged thirty, had slowly been losing the sight in the right eye. Vision: right, $\frac{5}{30}$; left, $\frac{5}{5}$. Fundus normal; central colour scotoma.

The right middle turbinal was found polypoid and engaging a deviation of the septum. On the left side of the septum opposite the deviation was a soft rounded swelling, which was easily removed with a snare, but so much bleeding resulted that the nose had to be packed some days and eventually cauterised with chromic acid. The patient, however, stated she could see better. Vision now $\frac{5}{30}$.

She was seen again in eight days, when, as a large ulcer had reappeared on the left side at the site of the former removal, the condition was diagnosed as due to lues and the patient put on iodide. In ten days' time the ulcer had disappeared, and the right side had also yielded to this treatment.

The oculist now reported: "Vision, right, $\frac{5}{5}$; no colour scotoma to be noted." Baumgarten considered that this result could not be attributed to the cure of the intra-nasal conditions alone, but that probably a gummatous deposit around the optic nerve had also responded to the general treatment.

In the light of the results obtained in these cases the author urges the necessity of submitting instances of both acute and chronic papillitis to a rhinological examination.

Although he is evidently quite satisfied himself as to the relation of cause and effect in the non-purulent cases, the description is rather disappointing, and the data regarding the alleged improvement of vision somewhat unconvincing.

Alex. R. Tweedie.

Burkett, H. S. and Meakins, J. C.—*The Value of Vaccine Treatment of Chronic Inflammatory Diseases of the Accessory Sinuses of the Nose.* "Boston Med. and Surg. Journ.," December 22, 1910, p. 957.

The authors conclude that vaccine treatment will sterilise the accessory sinuses of the nose when the subject of chronic disease. That the chronic discharge of mucus from the accessory sinuses of the nose is not so much due to bacterial infection as to habit hypersecretion. That the symptoms are not due to infection, but to hypersecretion and retention. That although vaccine therapy is a valuable adjunct to treatment, the establishment of free drainage by the removal of polypoid masses and redundant mucous membrane is more important, and that the cases of sinusitis showing a tendency to become chronic should be treated early by homologous vaccines.

Macleod Yearsley.

EAR.

Veis, J. (Frankfort-on-Maine).—*An Example of Rupture of the Tympanic Membrane in a Telephone Operator.* "Arch. f. Ohrenheilk.," Bd. lxxix, Heft 1 and 2, p. 103.

The patient, a girl, was rung up by a subscriber while in electrical contact with him. Immediately after she noticed pain and tinnitus in the affected ear, the left, and when the author saw her on the following day the membrane presented a rupture similar in appearance to that which results from a blow on the ear. Under appropriate treatment healing and complete restoration of function followed.

According to the author there are three ways in which the injury