

# ABSTRACTS

## EAR

*Some Remarks on Vestibular Nystagmus.* A. DE KLEYN. *Confinia Neurologia. Separatum xi, Fasc. 5.*

The first part of this paper is devoted to experimental work on the reflex arc of vestibular nystagmus. It is pointed out that little is known of the cause of the quick component in vestibular nystagmus but that experimental work has established a more extensive knowledge of the site of origin. Normal vestibular nystagmus can be elicited:—

- (a) After the removal of the cerebral hemisphere.
- (b) After removal of the cerebellum.
- (c) After a section of the brain just anterior to the abducens nuclei, whereby the nuclei of the oculomotor and trochlear nerves are put out of function, and
- (d) After a section of the medulla taken just behind the vestibular nuclei.

Thus it is apparent that a small reflex arc suffices for vestibular nystagmus with a normal slow and quick phase: peripheral labyrinth, vestibular nuclear area, abducens nucleus, abducens nerve and external rectus muscle.

This small arc is not only applicable to animals but also to the human as proved by experiments on an anencephalous monster which was devoid of cerebral hemisphere, cerebellum, mid-brain (including the oculomotor and trochlear nuclei) and in which all the ocular muscles were absent with the exception of the external recti. This experiment, while establishing that only a small arc is essential, did not rule out the possibility that other nuclei of the brain or other influences do not play a part.

A series of experiments were conducted to investigate the influence of external stimuli on nystagmus. These showed that stimulation of the nasal mucous membrane can cause some acceleration of the nystagmus whereas a stronger stimulation will irritate the vestibular system until ultimately complete paralysis of nystagmus may occur.

The second part of the paper is devoted to a few observations showing the application of experimental work on the clinical picture. Attention is drawn to the possibility of wrong conclusions being drawn from the caloric test where only cold water is used. It has been found clinically that the cold caloric test may give an apparent reaction in cases where there is known to be complete loss of labyrinthine function. The explanation is that there is a latent tendency to nystagmus arising from the opposite labyrinth which has been made manifest by the sensory stimulus of cold in the functionless side. In such cases a similar reaction would also be produced by warmth but the response would be a nystagmus to the opposite side (i.e. the response which might be expected from the cold caloric test). This has been confirmed by animal experiments.

Experimental investigation has also elicited a cause for a second type of case hitherto an enigma. Sudden vertigo may occur in some patients after bringing

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the head first backwards and then to one side. Experimentally it has been proved that this movement reduces the flow of the vertebral artery on the same side owing to pressure in its course between the atlas and the skull. If the auditory artery arises directly from the vertebral in these cases the result is a complete occlusion of the blood supply (the auditory artery being an end artery). The resultant anæmia of the labyrinth gives rise to vertigo.

J. GILROY GLASS.

*Über Die Gehorsverbesserung Mit Horapparaten.* URPO SIIRALA. *Acta Oto-Laryngologica*, March 1st-April 4th, 1945, xxxiii.

The author examined 685 persons who were permanently hard of hearing and attempted to classify them according to the improvement received from hearing apparatus.

His conclusions coincide with the impressions generally held by otologists and there is little new in the paper, but a useful task has been performed by putting these impressions on a sound scientific basis.

He notes that in general the older the patient the less tolerant of a hearing aid he will be.

G. H. BATEMAN.

*Experimental Histological Studies on the Labyrinth.* S. H. MYGIND, H. C. ANDERSEN, J. ARNVIG. *Acta Oto-Laryngologica*, July 1st-August 8th, 1945, xxxiii.

In volume xxxiii S. H. Mygind and his co-workers have published a series of six articles on experimental histological studies of the labyrinth. They describe a method of intravital staining and compare the results obtained with those obtained with postmortem staining. Differences are noted and discussed. Changes in the labyrinth caused by injection of histamine, adrenaline and other chemicals are studied. The whole series is well illustrated with microphotographs, and should be of great interest to the research worker in this line but is highly technical and most clinicians will have to await its interpretation before the results can be applied to clinical otology.

G. H. BATEMAN.

*Otitis Media caused by Swimming.* JOHN CHR. NIELSEN. *Acta Oto-Laryngologica*, February, 1945, xxxiii.

The author has carried out bacteriological studies on cases of bathing otitis occurring in 1941 and 1943. He concludes that bathing otitis is an endogenous infection and impure bath water has no etiological significance. This agrees with the opinion held by most otologists.

G. H. BATEMAN.

*Hearing. Some orientating remarks on tuning forks and audiometer and on the registration of defects of hearing.* S. H. MYGIND. *Acta Oto-Laryngologica*, February, 1945, xxxiii.

This very interesting paper provides an explanation for the apparent contradiction between tuning fork and audiometer tests in middle-ear deafness.

The author quotes a typical case of otosclerosis and obstructive deafness

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due to wax and gives the tuning fork tests and audiograms. The reason for the discrepancy is the fact that subjective loudness levels at the various frequencies do not vary equally with the change in physical intensity as expressed by decibels. The author then converts the audiograms into loudness audiograms with the subjective unit the "son" as the ordinate. This shows that in obstructive deafness the greatest loss is at the low tone end and not at the high tone end, as is suggested by the audiogram expressed in decibels.

He concludes that for complete examination of the auditory function tuning forks, monochord and audiometer are all desirable.

G. H. BATEMAN.

### NOSE

*Treatment of Frontal Sinusitis with Beck's Puncture.* A. JORGENSEN and K. R. MELGAARD. *Acta Oto-Laryngologica*, February, 1945, xxxiii.

The authors describe seven cases of frontal sinusitis treated by puncture through the anterior wall. This is the method described by Beck in 1933 when the cannula is left in situ for several days to permit of drainage and medication of the sinus mucosa. This seems a promising method of treatment which is so far not adequately recognized in this country.

G. H. BATEMAN.

*The Roentgen Treatment of Vasomotor Rhinitis.* AXEL RENANDER. *Acta Oto-Laryngologica*, February, 1945, xxxiii.

This paper gives an analysis of 226 cases of vasomotor rhinitis treated during three years, 1938-1941. The results of this treatment appear to be extremely promising as only ten per cent. were not improved and sixty seven per cent. report complete freedom from symptoms.

The treatment consists of three treatments of 150 r on the sinuses and nose with one or two days interval between treatments. The authors give inadequate descriptions of the technique as it is not clear in the text how many fields were used, or where the dose of 150 r was measured. A large field was being irradiated and therefore where the measurement was taken is of considerable importance.

No bad results from the treatment are reported.

G. H. BATEMAN.

*Local treatment with Sulfathiazole in Sinusitis.* PETER BERDAL. *Acta Oto-Laryngologica*, May 1st-June 30th, 1945, xxxiii.

These investigations consisted of 42 cases of maxillary sinusitis subjected to sulfathiazole treatment and 48 cases treated similarly with the omission of the introduction of sulfathiazole into the antrum. The results of the investigations are summarized as follows:

1. It could not be proved that the sulfathiazole treatment occasioned any reduction of the number of antrum punctures.
2. Nor that the sulfathiazole treatment reduced the number of operative cases.
3. The use of sulfathiazole in a 10 per cent. suspension in the maxillary cavity in sinusitis thus seems without any therapeutic effect.

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4. The sulfathiazole treatment is of equally little avail whatever the pathogenic microbes be that are present.

5. In the said form the sulfathiazole involves a state of irritation of the mucous membrane in the maxillary cavity, though this seems to be moderate.

G. H. BATEMAN.

*Orbital Complications following operations on Paranasal Sinuses.*

ERIK GODTFREDSSEN. *Acta Oto-Laryngologica*, May 1st-June 30th, 1946, xxxiii.

Examination of the literature shows comparatively few reports of orbital complications following operations of the sinuses. The author thinks that it is probably much more common than the literature would suggest as he was able to trace 8 cases in his own clinic in a six year period.

He has reviewed his own 8 cases and 42 reported in the literature from 1902 onwards. It seems that the complications are much commoner after intranasal ethmoid than any other operations. Furthermore the symptoms after maxillary operations are likely to be transitory whereas the majority were permanent after ethmoid operations. He therefore suggests that active surgical treatment of the complications should be instituted in those cases arising after ethmoid operations. He gives some indications for active surgical treatment.

G. H. BATEMAN.

*Local Treatment of Maxillary Sinusitis with Alfazol.* HELMER RASMUSSEN.

*Acta Oto-Laryngologica*, September 1st-December 31st, 1945, xxxiii.

The author has treated 58 cases of maxillary sinusitis with injections into the sinus of alfazol and has, at the same time, had 59 control cases. The treatment of both series was identical except that the alfazol was omitted in the control group.

No improvement in the results with alfazol was noticed and no benefit seemed to be derived from local chemotherapy.

Alfazol is a proprietary sulfanilamide derivative.

G. H. BATEMAN.

## TONSILS

*Tonsillectomy: General or Local Anaesthesia.* KARSTEN KETTEL. *Acta Oto-*

*Laryngologica*, July 1st-August 30th, 1945, xxxiii.

This is an interesting report on 500 cases of tonsillectomy under general anaesthesia. The results in these cases compare favourably with cases done under local anaesthesia in other Danish hospitals. The author concludes that general anaesthesia is the method of choice for tonsillectomy in adults. This is particularly interesting when it is remembered that very recently in this stronghold of general anaesthesia, in the section of Anaesthetics at the Royal Society of Medicine, local anaesthesia was advocated for tonsillectomy in adults on the very grounds that this author advocates general anaesthesia:

Less danger.

Fewer complications.

Less anxiety to patient and surgeon.

Less post-operative pain.

G. H. BATEMAN.

## Miscellaneous

*Cases of Familial Œsophagus Stricture.* SIGFRID ABERG. *Acta Oto-Laryngologica*, May 1st-June 30th, 1945, xxxiii.

The author was able to examine members of three generations of one family in which cases of simple stricture of the œsophagus occurred. The symptoms were similar in all cases and the three subjected to œsophagoscopy showed similar simple strictures. In all cases the symptoms appeared around the age of forty. There seems no doubt that these strictures were due to a congenital lesion.

No other cases of similar familial strictures can be found in the examination of the literature.

G. H. BATEMAN.

### MISCELLANEOUS.

*Osteomyelitis Necroticans Faciei.* HELMER RASMUSSEN. *Acta Oto-Laryngologica*, May 1st-June 30th, 1945, xxxiii.

Two cases are reported both of which terminated fatally. Thirty-three similar cases have also been collected from the literature. The author can find no cause for the lesion and histological examination showed simple granulation tissue. He considers this to be a disease sui generis.

G. H. BATEMAN.

*Complications in the Ear, Nose and Throat in Infectious Mononucleosis.*  
ELMAR BERG. *Acta Oto-Laryngologica*, September 1st-December 31st, 1945, xxxiii.

The case histories of 550 patients suffering from infectious mononucleosis were examined and it was found that 187 suffered from ear, nose and throat complications.

As a result of this investigation it appears that the lymphoid tissue in the upper respiratory tract is damaged by the original disease and thus made susceptible to secondary infections.

The authors suggest that local prophylactic treatment should be instituted to the upper respiratory tract but that the incidence of the complications is spread over so long a time that general chemotherapy is not indicated.

G. H. BATEMAN.