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VERTIGO OF MÉNIÈRE.*

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I FEEL that it is a great honour to be allowed to report on this interesting subject in the great city of Paris, which, indeed, is the very birthplace of our knowledge of auditory vertigo; for it was here that the late Dr. P. Ménière first threw light on this most difficult subject.

It was truly a grand discovery in medical science which has enabled us to differentiate the symptoms of that disease, now associated with the name of Ménière, from those far more serious ones which generally indicate disease of the brain. With proper care the physician is now able to diagnose this condition with precision in perhaps ninety-nine cases out of every hundred that are brought before him; and yet, through lack of a little special knowledge, many a medical man has mistaken this Ménière's vertigo either for mere biliousness on the one hand, or for grave brain trouble on the other. How often have some of us heard from patients suffering from Ménière's disease, "Oh, but Dr. —— told me that I must make my will and settle my affairs, as this will prove fatal sooner or later; and now you smile, and say that I cannot die from it"!

At the outset I wish to say that I intend to confine myself mainly in this paper to the results of my own experience rather

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than to the gathering together of that of others. And we have to confess that our knowledge of the subject has not advanced so very much since Dr. Ménière introduced it to the profession now some forty years ago (1861).

Our actual knowledge of the causes of this condition is still very vague. We are satisfied that it is an affection of the semicircular canals, that it is probably due to congestion of, or extravasation of blood into, those canals; but we want to go further. True, this explains readily enough the *reason* for the apoplectiform variety of the disease, where there is sudden severe vertigo, vomiting, and tinnitus, accompanied with more or less complete loss of hearing; but it only partially explains the epileptiform condition. This variety seems to me to be a definite disease running a more or less regular course, with attacks recurring at intervals with increasing deafness, and gradually wearing itself out, if not arrested by treatment or by Nature herself.

Classification of Ménière's Vertigo.—As there is some confusion as to what is meant by Ménière's disease, I prefer, when lecturing to my students, to draw a distinction between *Ménière's symptoms* (or symptoms of irritation of the semicircular canals produced by some external influence, such as pressure, or extending inflammation) and *Ménière's disease proper*, which is due to a lesion in the posterior labyrinth itself (utricle and semicircular canals).

Ménière's symptoms may be produced by direct, by indirect, or by reflex irritation of the posterior labyrinth.

This irritation may have its seat in the *meatus;* thus, occasionally in syringing, though more especially when there is a perforation of the membrana tympani, the patient will experience the vertigo, rotary sensations, and sometimes sickness. The same may result from the pressure of a ceruminous plug or of a foreign body.

Again, the *middle ear* may be the source of trouble. Sometimes, in otitis media, by extension of the inflammation to the internal ear Ménière's symptoms will be produced. Also pressure arising in the course of chronic middle-ear catarrh will now and then bring about a similar result.

Intercranial lesions, interfering with the equilibration nerve tracts or with nerve centres, sometimes give rise to Ménière's symptoms, and in these cases errors in diagnosis may be easily made.

Before leaving this part of my subject, I ought to refer to *sea-sickness*, which in my opinion is mainly an affection of the posterior labyrinth, due to irritation of its nerve terminations from the

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swaying of the vessel, producing almost rhythmic movement in the fluid within the semicircular canals.

Ménière's disease proper may be divided into:

1. The *apoplectiform*, when there occurs one severe seizure, which at once practically destroys the function of the ear attacked, the lesion being so extensive as to involve the anterior labyrinth (cochlea and saccule), as well as the posterior one (utricle and semicircular canals). The lesion is probably a hæmorrhage or severe congestion.

In the majority of cases the direct cause can rarely be traced, although an altered condition of the blood (as in leucocythæmia, kidney disease, or the like) undoubtedly acts as a marked predisposing cause. Sunstroke, and acute inflammation such as occasionally occurs in the course of mumps or in tertiary syphilis, sometimes produce this condition. More rarely the cause is traumatic; thus, I have seen it brought about by a smart blow behind the ear from a golf-ball, which, I need hardly explain, is a small, very hard ball driven with considerable force.

2. *Epileptiform*.—This is characterized by recurrent attacks, as in the case of fits of epilepsy, hence its name. (And here it may be well to point out that both in the apoplectiform and the epileptiform varieties the names must not be taken to imply that the disease has any connection either with cerebral apoplexy in the first case, or with epilepsy in the second.)

In my opinion, the epileptiform condition resembles a definite disease, for it tends to run a course of two or three years, gradually passing off, as I have already stated, as the functions of the ear become destroyed, unless arrested by treatment or by Nature herself; whereas the apoplectic form may be regarded more or less as an accident.

Debility, especially when produced by some long tedious illness, is a common predisposing cause. And I have often found that patients who have had an attack in the past, from which they have recovered, are liable to have a recurrence some years afterwards if they have suffered from any long debilitating malady.

Gout and sunstroke are sometimes the exciting causes, but our knowledge on this point is very imperfect. Occasionally, though not nearly as frequently as is commonly taught, this form of Ménière's vertigo is associated with middle-ear catarrh.

Treatment.—The ultimate object of the study of the science of medicine must be to obtain the victory over disease; for science, as Oliver Wendell Holmes so well says, "forges for every lock its mastering key." And though, theoretically, a correct knowledge of

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the cause and pathology of a disease must be the forerunner of a completely satisfactory treatment, yet in practice we do sometimes find that our powers of amelioration and treatment outstrip our knowledge of "the why" and "the wherefore." And this, in my opinion, is true in the case of Ménière's vertigo, in which, in spite of the frequent assertion by many physicians that little or nothing can be done, I believe great help may be derived from certain methods of treatment, though I am well aware that there is a great deal still to be learnt, and I look forward with eagerness to the time when our knowledge of the causation and pathology of the disease will enable us to improve our methods of treatment yet more fully.

Ménière's Symptoms.—The vertigo produced by syringing only requires rest for it to pass off. But when the syringing needs to be repeated frequently, and the vertigo resulting therefrom is very distressing, some form of gentle injection should be adopted, such, for example, as that obtained by a Clarke's douche, which gives a steady, regular flow.

When it proceeds from the pressure of a plug of cerumen or a foreign body in the meatus this should be removed in the ordinary way, and, if the vertigo still persists, bromide or hydrobromic acid should be given for a day or two.

When produced by extension of inflammation from the middle ear, rest in bed, the application of blisters or of leeches, and in severe cases a Wilde's incision will be found to be most effective, together with the usual treatment of the otitis media itself. Occasionally the sickness is very marked and prolonged; in these cases rest in bed is the more imperative, and although the usual remedies for sickness should be employed, yet it is mainly upon counter-irritation that we must rely for alleviation.

When it occurs in the course of chronic middle-ear catarrh the treatment is that of the catarrh itself, and in some of these cases the relief given by inflation by means of the catheter or by Politzer's bag is very marked.

In intercranial lesions the Ménière's symptoms are only of secondary importance as compared with the gravity of the lesion itself; but bromides and hydrobromic acid will often afford great relief.

In the matter of treatment of sea-sickness, if I am not here considered to be going outside my subject, I should like to point out that of the many so-called remedies which are so freely recommended, only those which act as nerve sedatives are of any real value, and it appears to me that of these only such as are very

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decided in their action are likely to prove of use. Thus, bromides are not so good as chloral; this latter in a 20-grain dose will frequently prevent sickness for many hours, and it has the advantage of not leaving any disagreeable effects behind.

Ménière's Disease.—*The Apoplectiform.*—From the severe nature of the lesion that produces this variety there can be little hope of any restoration by treatment; but rest in bed is imperative as, in fact, the patient is only comfortable in that position. Large doses of bromide or of hydrobromic acid may be tried in order to reduce the nerve irritation, and sometimes free blistering will restore a little hearing. After the attack has passed off, in a few favourable cases the pilocarpin treatment may be used for the same purpose.

The Epileptiform.—Although many physicians teach that very little advantage is to be gained by treatment in this form of Ménière's disease also, my experience by no means bears out that opinion, for I have found that in a large majority of such cases the disease may be arrested, or much improvement obtained by suitable means. The tinnitus, it is true, will generally persist, but it slowly diminishes in intensity; and though the hearing, as a rule, remains defective, in some rare instances it also is considerably improved.

Quinine in large doses, as first recommended by Charcot, has been rather extensively used, and apparently sometimes with distinct benefit; but probably this benefit has been chiefly due to its tonic effect. Salicine or salicylate of soda will, in a small proportion of cases, directly cut short the attack; I have found 10-grain doses three times a day sufficient for this purpose. But by far the most successful treatment is obtained by bromine in some of its combinations. Bromide of potassium or ammonium in 20-grain doses three times a day; or, better still, 40 to 60-minim doses of hydrobromic acid (acid. hydrobrom. dil.—B.P.) three times a day, taken well diluted, has proved in my hands more successful than any other treatment. I have reckoned that 80 per cent. of these cases have yielded more or less completely to this method, but it is important to remember that the doses must be large.

The general treatment should be of a tonic nature and not antiphlogistic, as recommended by some authorities. Thus, small doses of quinine, iron, and strychnine are sometimes very useful, together with a generous diet.

In those somewhat rare cases which are associated with middle-ear catarrh, the ordinary treatment for that condition is of much service, and it is in these cases that some improvement in the

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hearing power may be hoped for. But I deprecate the indiscriminate and forcible inflation, by means of the catheter or of Politzer's method, in most cases of epileptiform; indeed, sometimes where hyperæsthesia of the nerve exists positive harm may result therefrom.

Except when associated with middle-ear catarrh very little improvement in the hearing power can be effected, but occasionally something may be done in this direction by blistering. This may also lessen the tinnitus. In a few cases where the patient is robust and circumstances are favourable the pilocarpine treatment may be tried. Few of us would, I imagine, dare to recommend bicycling as a treatment for patients suffering from Ménière's vertigo, but I have a case of a lady who resorts to bicycling when the giddiness comes on, as she invariably finds it is arrested by this form of exercise. I shall be glad to know if others have met with a similar experience.

Hitherto we have entirely depended on medicine for the treatment of these conditions; but within the last year surgery has stepped into the field, and by one brilliant achievement Mr. Charles Ballance has opened up a vista of glorious possibilities.

By his kind permission I am able to give you the brief notes of this extraordinary case, a fuller account of which will be published in the forthcoming Transactions of the Otological Society of the United Kingdom.

E. M——, aged 54, admitted to St. Thomas's Hospital, February 5, 1900.

History.—Left otorrhœa since childhood. Previously admitted to St. Thomas's Hospital May 7, 1898, with large masto-squamous abscess, foul otorrhœa, and inability to walk without assistance in consequence of vertigo. Operation was performed, but the bridge and outer wall of the attic were not removed. Since this operation the vertigo has continued.

Present Condition.—Scar over mastoid; foul left otorrhœa; vertigo so bad that she cannot walk at all without assistance; loud and distressing tinnitus; left side quite deaf, and tuning-fork not heard.

February 6, 1900: *Complete Mastoid Operation.*—Behind the tuberosity a sinus was found leading into the petrous for $\frac{1}{2}$ inch, and from it pus was oozing. The petrous was removed till no further sign of pus was discoverable. In doing this the semicircular canals were, in part, destroyed, and the back of the vestibule opened. Clear fluid escaped. The cavity in the petrous at the conclusion of the operation was about $\frac{5}{8}$ inch in depth, and

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in size would have taken half a Barcelona nut. It was repeatedly swabbed out with absolute phenol. For several days the patient was very sick and giddy.

February 17: *Epithelial Grafting Operation.*—On throwing the flap forwards clear fluid was seen flowing from the cavity in the petrous. *February* 19: No sickness and no vertigo since grafting operation. *February* 22: Plug removed. Patient at once said she could hear well. *March* 20: Healing has been complete for some days, and patient can run down the ward. There is no vertigo, and the tinnitus has ceased. The hearing has returned in a marvellous way. Three weeks after the operation the watch could be heard at 6 feet, and a whisper at, at least, 23 feet distance.

With such a case before us are we not justified in looking forward with sanguine expectation to the assistance which shall be rendered by surgery in the near future, whereby vertigo, tinnitus, and deafness in many a labyrinthine case may be overcome?

Of a truth, gentlemen, we may indeed say that in recent years Aural Surgery has advanced by leaps and bounds. How much further will she bring us along the road which leads to victory? By what paths will she make her way? These things we know not. Only Imagination can foreshadow the answer, and only Time himself can prove the truth of her prophecy.

BRITISH MEDICAL ASSOCIATION.

ANNUAL MEETING, IPSWICH, JULY 31, AUGUST 1, 2, 3, 1900.

SECTION OF LARYNGOLOGY AND OTOLOGY.

AN INTRODUCTORY ADDRESS BY

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President of the Section.

IT is my pleasant duty to welcome those gentlemen taking part in the business of this section, and to thank not only those who have promised to introduce the discussions, but those who have tendered papers for our consideration. I trust that, both by reason of the work done and of the numbers attending our section at Ipswich, this year will prove worthy to rank with the best of preceding years.

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