A CLINICAL LECTURE ON A CASE OF HYPERTROPHY OF THE GUMS.

Delivered at University College Hospital
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I HAVE had recently in my wards a remarkable and somewhat uncommon case of hypertrophy of the gums, on which I propose to make a few remarks. The patient was a young man of 26, whose appearance is shown in the photograph kindly taken by Mr. Clover. The hypertrophy of the upper lip and the fulness of the cheeks were the most prominent features when the mouth was closed, but upon opening it the remarkable condition of the gums shown in Fig. 1 was at once visible,

Fig. 1.

and the open mouth reminded one of the mouth of a hippopotamus or rhinoceros on a small scale.

The history was that the enlargement of the gums was first noticed four years ago, when the patient went to the Middlesex Hospital and was admitted under the late Mr. Hulke. I am enabled by the kindness of Mr. Storer Bennett to show you two casts which he took at that time, and which show comparatively slight hypertrophy of the gums and no displacement of the teeth. Mr. Hulke cut away the hypertrophied gums of both jaws, and the patient left the hospital relieved. Three months afterwards he noticed that the growth had recommenced, and though it has steadily made progress for the last three years, he has had no further advice for it.

On admission here the external deformity was well marked, and on opening the mouth the gums of both jaws were seen to be enormously hypertrophied, and most of the teeth to be loosened and displaced. The palate looked at first like a cleft palate, but this was due to the hypertrophied gum on each side covering the palate nearly to the median line, where a small interval was left. This condition I have met with before, and I show you a cast of the mouth of a young lady who consulted me ten years ago, in whom a similar condition existed.

As the parts are evidently very vascular, and as I knew by previous experience of similar cases that the bleeding would be free, I took the precaution of having the patient in the recumbent position, with his head dependent over the end of the operating table. I then rapidly extracted all the loose teeth of the upper jaw, leaving only the two canines, which were firm, and cut away with scissors the hypertrophied gum down to the alveolus, the edge of which I removed with bone forceps. The bleeding was free, and especially from the folds which enveloped the palate, but was stopped partly by the use of Paquelin's cautery, and partly by plugging the sockets of the teeth.

The patient made a good recovery, and a fortnight later I performed a similar operation on the lower jaw, removing all the loose teeth except the canines and bicusps, and clear-

ing away freely the hypertrophied gums. The patient's condition now, two months after the last operation, is very satisfactory, the gums being in a healthy condition, and there being nothing abnormal beyond a little looseness of the mucous membrane of the lips.

A microscopic examination of the parts removed, by Mr. Drew, showed that the mucous membrane covering the growth was healthy, the bulk of it being composed of delicate bundles of wavy fibrous tissue, which interlaced. Between the bundles were numerous cells, in some places forming large clusters. Numerous vessels were scattered through the growth.

Hypertrophy of the gums is a by no means common affection. The first case recorded was, I believe, by Salter, the case occurring at St. George's Hospital in 1859, under Mr. Pollock, in a girl aged 8. Salter speaks of it as a congenital affection, but this, I think, is a mistake, for the affection, though occurring in children, has never, so far as I know, been noticed at birth.

Just thirty years ago I saw a case in this hospital under Mr. Erichsen, in a child of 2½ years, in whom the affection had shown itself at the age of 7 months, when the teeth began to appear. Mr. Erichsen removed the exuberant growth freely, and cauterised the cut surfaces, but a permanent cure was not brought about, for, when 7 years of age, the child was brought before the Royal Medical and Chirurgical Society by the late Dr. John Murray, to illustrate a paper on Three Peculiar Cases of Molluscum Fibrosum in Children of One Family. Mr. Erichsen's patient was the eldest of the three, and her portrait (which was shown) bears out the description given of the hypertrophied condition of the gums. The other children, aged 4 and 2, had similar conditions of the gums.

Fig. 2.

Ten years later I had a similar case in this hospital in a girl of 4½ years, who was one of five otherwise healthy children. The swelling of the gums had been noticed for two years, and when she was admitted the gums were enormously hypertrophied, as is shown in the casts taken at the time. Under chloroform I removed each hypertrophied gum and alveolar border in one piece, which I have had preserved in the museum, and she made a good recovery. About the same time I had a case in private in the person of a young man aged 26, in whom the hypertrophy affected only one side of the lower jaw, extending from the right wisdom to the left canine tooth. The affection had been noticed from early childhood, and gave no pain. Here I removed the affected alveolus with bone forceps, and a complete recovery ensued, which I know to be permanent, as I happen to have heard from the patient quite recently.

It is remarkable that in most of the cases of children affected by hypertrophy of the gums some want of mental development was noticed, but certainly in the two young men upon whom I have operated no such deficiency was to be observed.

A remarkable instance of the disease, also occurring in an adult, was recorded by Mr. MacGillivray, Surgeon to the Bendigo Hospital in Australia, and the condition of the patient is shown in Fig. 2. The patient, a woman aged 29, seemed to have suffered from the affection in both jaws soon after birth. At the age of 10 portions of the gum were cut away, and several teeth extracted, and she had herself in later life cut away portions of the projecting gum with a razor.

[1896]

All these operations gave rise to severe hæmorrhage. The enormous growth shown in the drawing seemed to have originated mainly from the palatal portion of the gums, the labial surface being comparatively sound. Mr. MacGillivray removed the hypertrophied gums and alveoli with perfect success.

A condition of outgrowth from the gum, due to the irritation of tartar or of artificial teeth, somewhat resembling hypertrophy of the gums but much less vascular, is known as polypus of the gums; and it happens that I had a remarkable instance of this last week. You will remember an old blind woman who was sent to me with a large fleshy mass projecting from the upper alveolus, which I removed at once by tearing it from its attachment with the finger, the resulting hæmorrhage being slight. We found that it had sprung from the upper alveolus, in which the teeth were broken and encrusted with tartar, and it is evident that this fleshy mass was nothing more than a local hypertrophy of the gum, the result of irritation. This must not be confounded with the true fibrous epulis which springs from the periosteum of the alveolus, nor again with the vascular myeloid growth which springs from the interior of the alveolus, and forms a maroon-coloured tumour—badly called a myeloid epulis—of which we have recently had an example in a young girl aged 17.

GIDDINESS AND STAGGERING IN EAR DISEASE.

II.¹

By THOMAS BARR, M.D. GLASG.,

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MIDDLE-EAR GIDDINESS.

THIS form of giddiness is produced by pressure primarily applied to the walls of the middle ear. The pressure of inflammatory products is most common, but the pressure of air, water, or medicated solutions may also give rise to giddiness. While it is probable that sudden labyrinthine pressure invariably excites giddiness, it is not so in the case of the middle ear, as many persons have augmented middle-ear pressure without giddiness. While primarily applied to the walls of the middle ear, the pressure is in many cases transmitted to the labyrinthine fluid, the tension of which it increases with irritating effects upon the vestibular and ampullary nerve endings. Such transmission of pressure frequently takes place through the fenestral openings into the labyrinth, especially if there be an abnormally shallow condition of the recesses of the fenestræ. While, if there be carious erosion on the inner tympanic wall, pressure may then act directly on the contents of the cochlea, vestibule, or external semicircular canal. Thus, Dr. Macewen informs me of a case in which granulation tissue was found protruding from a carious opening at that part of the external semicircular canal where it comes close to the inner wall of the tympanum, giving rise to great disturbance of the equilibrium, taking the form of backward and forward oscillations of the head and body. On the other hand, I removed from a boy's ear a sequestrum which included the whole labyrinth, and yet no disturbance of equilibrium had been observed. It is very probable, however, that many cases of giddiness from middle-ear pressure are due, not to this direct effect upon the fluid of the labyrinth, but to reflex action excited by irritation of the nerves distributed in the mucous membrane of the middle ear. There is not only a close relationship between certain branches of the auditory nerve and the centre of equilibrium in the cerebellum, but there seems also to be a reflex connection between the nerves of the middle ear and this centre, so that when the former are irritated the latter is apt to become disturbed. It may be that the reflex efforts are produced indirectly through the medium of connecting branches of the auditory nerve. No doubt, as we shall find afterwards, there are persons specially predisposed by certain natural peculiarities of the nervous system, or by some disturbance of the health, to these reflex in-

fluences, and thus, as we have seen, many persons may have augmented middle-ear pressure without giddiness, while others in the same circumstances may be violently affected.

MIDDLE-EAR GIDDINESS CONTRASTED WITH LABYRINTHINE.

The whole of the symptoms of a true Ménière's attack may be produced by middle-ear pressure, but in some the sickness and vomiting are absent. The vertigo may be extreme, or it may amount to no more than a staggering backwards when the head is suddenly turned round, especially to the affected side, with a tendency to fall forwards when the head is moved again to the front. Some patients complain of a staggering tendency in the dark, while others say they tend to fall if they turn quickly or stoop. An important distinction between this form of vertigo and the labyrinthine variety is that here the whole of the symptoms frequently disappear, the accessibility and nature of the region affected enabling us to remove, by operative or other treatment, the pathological cause. We found also in the class of cases due to primary labyrinthine mischief that while the vertigo, sickness, and vomiting usually passed off, the noises and deafness generally remained permanent.

In the present class of cases, on the contrary, not only are the vertigo, sickness, and vomiting amenable to treatment, but the noises in the ear are usually got rid of, while the hearing is in most cases much improved, if not entirely restored. In the present class of cases, also, the giddiness is frequently preceded by other symptoms of ear disease (unless in cases due to sudden air or water pressure), such as pain in the ear, defective hearing, subjective sounds, discharge from the ear, etc., in this way contrasting with the labyrinthine class of cases, in which we found that the giddiness is usually sudden, and the first symptom complained of, although quickly followed by the other symptoms. In middle-ear giddiness, also, the subjective sounds are rarely so distressing, nor is the defective hearing so extreme, as in the former class of cases; while bone conduction of sound, as indicated by the various tests, is in the great majority of cases in excess of air conduction. This is, as we have already indicated, contrary to what is usually found in labyrinthine giddiness.

GIDDINESS FROM EXCESSIVE AIR PRESSURE.

Many examples of giddiness due to excessive, and especially to sudden, air pressure upon the walls of the middle ear have come under my notice. The act of blowing the nose, by forcing a current of air into the middle ear, sometimes excites giddiness. A medical friend, subject to ear giddiness, informs me that he has to blow his nose with the greatest care, otherwise giddiness and loss of balance are excited. The effects are still more striking where violent blowing of the nose is indulged in during the existence of nasal catarrh with obstructed nasal passages, such as the following:

Giddiness from Blowing the Nose.—A gentleman, 25 years of age, had been suffering for two or three weeks from catarrhal obstruction in the nose, with a hammering sound in the left ear. Whilst walking in a Glasgow street he became so giddy, immediately after blowing his nose, that for five minutes he was only able to avoid falling to the ground by laying hold of a lamp-post, and was strongly impelled to wheel round to his right side. The giddiness was followed by temporary nausea, but not by vomiting. A few days after the attack I found on examination that the hearing distance was reduced to $\frac{1}{2}$ in the left ear, in which ear the membrane was of a bluish colour, and partially injected. Ultimately all the symptoms disappeared under treatment.

The pressing of air into the tympanic cavity by forced expiration while the nose and lips are closed (Valsalva's experiment) is a more fruitful source of giddiness. A gentleman informed me that, while seated in Kelvin Grove Park, he fell to the ground from intense giddiness excited by this procedure, which he had been advised to practise for the relief of deafness. This as a method of treatment is, it may be remarked in passing, often injudicious, and much too frequently employed by persons with defective hearing, sometimes at the suggestion of medical men. The method is so very easy that it is practised by some persons as a preliminary to every interview which requires hearing, and in this way deaf people may resort to it twenty or more times daily. By so doing, a slight transient improvement of hearing may be gained, but at the expense of permanent aggravation, through serious impairment of the normal tension of the membrane. No doubt the giddiness may, in the case of Valsalva's experiment, be partially due to the stasis in the

¹ The previous communication by Dr. Barr was published in the BRITISH MEDICAL JOURNAL of December 28th, 1895, p. 1668.