

CONTRIBUTION TO THE TREATMENT OF DEAF-MUTISM BY OPERATION ON THE SO-CALLED ADENOID VEGETATIONS.

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GREAT attention has lately been directed to the relation between deaf-mutism and the so-called adenoid vegetations. Various authors, working in different countries, upon careful investigations, came to exactly the same conclusions, namely, that in the deaf and dumb we much more frequently meet with adenoid vegetations than in healthy children. For instance, Lemcke¹ reports 58 per cent., Wroblewski² (Poland) 57.5 per cent.; Peisson,³ also, in over half of the deaf and dumb, found post-nasal growths. Further, Frankenberger,⁴ 59.49 per cent. Finally, Aldrich (cited by the last author) gives a still greater percentage, namely, 73 per cent.

It will be seen that adenoid vegetations occur in the deaf and dumb very frequently. This fact is still more striking if we draw attention to the relatively very small percentage of these disorders, as is proved by analogous investigations, in healthy children. Such investigations are not wanting. Already Meyer (discoverer of adenoid vegetations) states that they hardly happen in 1 per cent. A little larger percentage gives Doyer (cited by Frankenberger), namely, 5 per cent.; Schmiegelow, 5 per cent. of greater and 13 per cent. of less degree; Wroblewski, 7 per cent.; lastly, Kafemann, 9 per cent.

What an enormous difference in these figures! Is it possible, in sight of this, to suppose a simple coincidence? In my opinion it is not.

From the theoretical point of view it is probable that children that are born with adenoid vegetations (and there is no doubt about this occurrence, considering the cases known in literature, as, for instance, those of Thost, E. Fraenkel, Jaworski (Poland)—this latter case was a child nine months old; I, myself, also recollect some cases of this kind, *i.e.*, post-nasal growths in the newborn), or that get them in the first years of their lives, are frequently deaf from this cause, and are not able to learn to speak, or forget what they did know.

¹ "Die Taubstummheit im Grossherzogthum Mecklenburg Schwerin ihre Ursache und ihre Verhütung." Leipzig, 1892.

² "Pszeglast Lekarski," 1891, Nos. 23, 24.

³ "These de Paris," 1883.

⁴ "Adenoide Vegetationen bei Taubstummen nebst einigen Bemerkungen ueber die Aetiologie der Taubstummheit." "Monatschrift für Ohrenheilk.," 1896, No. 10.

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1 prop. oper.

The cause of deafness is the mechanical obstruction of the Eustachian tube, or inflammatory process in the middle ear. That this is the case is also proved by statistics. For instance, Halbeis¹ gives 53 per cent.; Meyer and Hartmann a still larger percentage of post-nasal growths with the deaf, namely, 74·8 per cent., 74·18 per cent.

This theoretical speculation, which *à priori* presents itself so plausibly, finds its confirmation in practice—namely, there exist in literature cases, although they are rare, of deaf mutes cured by extirpation of adenoid vegetations. Here are to be mentioned, before all, two cases of Arslan and one of Couétoux (cited by Helme²). I also had occasion lately to observe, as well as to treat with a very good result, one such case.

G., five years old, a boy, was sent to me by one of my colleagues on account of congenital deaf-mutism. On close interrogation of the child's mother, I learnt that her twenty-year-old son was also deaf and dumb from birth. A daughter was also deaf and dumb, and died when four years old. The other two daughters are living, and speak and hear well. The eldest son was born with atresia ani, and died without being operated on. On examination I convinced myself that the child could neither hear nor speak.

Instead of speech there was a kind of stuttering, which it was quite impossible to understand.

The boy was physically fairly well developed. In the naso-pharyngeal cavity I found, by palpation, enormous quantities of adenoid vegetations; in the ears, retraction of the tympanic membranes. The internal organs did not present any abnormalities. Naturally, without promising the parents an absolutely favourable result, I proposed an operation, the more so as the child snored, and had the mouth always open, which caused frequent colds. Besides, he had a kind of aprosexia, *i.e.*, inability to concentrate the attention.

With the assistance of Dr. E. Zielinski, who administered chloroform (half narcosis, as I usually employ in such cases), I operated by means of Jurasz forceps and Gottstein curettes, as well as by finger wrapped round with iodoform gauze, soaked in 1 in 1000 sublimate solution (in order to remove the rest of the growth antiseptically, not being in favour of irrigation after the operation on account of danger to the ear).

The post-operative course, as usual in my cases, was favourable—no complications at all. In a week the wound healed.

After three months the boy was brought to me, and the mother told me with great joy that immediately after operation the hearing improved, and the child began to pronounce at first single words, later whole sentences, more or less distinctly.

Half a year after I had again occasion to see the patient. According to the mother, steady improvement in speech continued. The boy, as the mother emphasized, developed intellectually in a marked degree. Also his physical development improved greatly.

In another analogous case of a deaf-mute boy four years old, from

¹ "Die Adenoide Vegetationen des Nasenrachenraumes," 1892.

² "Traitement des Végétations Adénoïdes." "Bull. et Mém. de la Soc. Franç. d'Otol., de Lar., et de Rhin.," 1896, XII., p. 50.

whom I also entirely extracted the adenoid vegetations under chloroform, the result immediately after operation was also favourable. The hearing improved, and the child began to speak some words. Unluckily I am wanting further news of this case.

I am far from affirming from these observations that in every case deaf mutes may be cured by operative measures. I am, however, of opinion that whenever we find adenoid vegetations in deaf mutes, especially in large quantities, it is before all necessary to remove them.

If the result be only slightly satisfactory, it does not exclude the use of other methods of treatment (*i.e.*, teaching of speech), which in these cases may be much easier.

I suppose also that by early operation on adenoid vegetations (age and weakness of the child do not prove any contra-indication to this operation, which many authors, as I, for instance, apply in even very young infants) the development of the deaf-mutism may be avoided.

In my opinion this prophylactic signification of this operation is of great importance, and this question is worth while to carefully study.

