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consequence goes about with his mouth open. Besides the æsthetic disadvantages of this, we get a much more serious evil in the fact that the mouth is always drier than it should be, and in consequence micro organisms from the food tend to adhere to the teeth instead of being washed away by the saliva. There is therefore a tendency to decay of the teeth and other results of oral sepsis.

Another result of obstruction to respiration is that the chest develops badly and we get the deformity known as pigeon breast. When obstruction is well marked the child will often suffer from attacks of difficulty in breathing, especially during sleep, and, in fact, many of the "night terrors" of children are due to adenoids. Such children also have a chronic cold in the nose—that is to say, inflammation of the mucous-membrane—and a nasal, toneless sort of voice. The constant recurrence of a cold in the head is usually the reason for seeking medical advice.

Owing to the blocking of the eustachian tubes, we get deafness, and often a chronic inflammation of the middle ear, which shows itself in a constant purulent discharge from the meatus. Adenoids are certainly the commonest cause—apart from scarlet fever—of discharging ears.

Apart from these mechanical results there is a group of symptoms which are due to irritation and which show themselves in various remote parts of the body. The most important of these is a tendency to attacks of croup or spasmodic closure of the orifice of the larynx, which are often very alarming. The child wakes up with a start in the night, and for a few moments is quite unable to get any air at all through his larynx, and in consequence becomes blue in the lips, and ultimately nearly black in the face. Just as he appears to be at the point of death the spasm of the larynx relaxes, and several inspirations are taken with a loud crowing sound. Generally three or four such attacks occur in the space of a few hours, and the spasm then disappears entirely for a time, though relapses are very common. However alarming these spasms may be, death never results, because as soon as the blood becomes charged with carbonic acid, it acts as an anæsthetic to the part of the brain that is responsible for the attacks, and the spasm relaxes.

Another spasmodic affection that is often due to adenoids is incontinence of urine, and it not infrequently happens that children are punished for this, when the appropriate treatment should really be directed to the naso-pharynx. Stammering also is sometimes due to the same cause, as are also some kinds of persistent headache.

Inasmuch as the children who suffer from adenoids are continually somewhat short of air, and therefore of oxygen, they are apt to be anæmic, dull and listless, which, when associated with the deafness from eustachian obstruction, makes the child backward at school.

For adenoids there is only one treatment, namely, thorough removal, followed by constant drilling on the part of the parents to prevent the child continuing to breathe through the mouth (as a habit) after the obstruction to nasal respiration has been removed.

As regards the method of removal, surgeons differ : some employ a curette, while others nip off the growth with forceps; the essential feature, however, is that the removal shall be thorough. If enlarged tonsils are present, they can either be removed at the same time, the child being under a general anæsthetic, or, if it be desired to avoid this, they can be done " in penny numbers "—the tonsils one week and the adenoids the next, or vice versa. It is always desirable, however, to avoid chloroform, for children with adenoids are apt to take this anæsthetic very badly, and several fatalities have been recorded. Ethyl chloride is safer, and, nowadays, many anæsthetists prefer ether administered by the open method.

If an anæsthetic be given, the child is placed either lying on his side, or on his back with the head well over the end of the table. A gag is inserted, and the tonsils are removed first with a guillotine, and then the adenoids with a curette or forceps, the remains of growth around the eustachian tubes being subsequently scraped away with the finger-nail. Hæmorrhage is often sharp at first, but from the removal of adenoids alone is practically never alarming, and always ceases when the child comes round from the anæsthetic and takes a few deep respirations. It can be controlled by a hot or cold douche, or, if necessary, by plugging the space from which the growths have been removed with gauze. If an anæsthetic be not employed, the child is wrapped up in a blanket and held on the lap of the nurse with the head resting on her .shoulder, someone steadying the head from behind; a gag is then inserted, and the adenoids removed as before.

Owing to some swelling of the parts after the operation, the full benefit is not usually felt for a few days afterwards, until this has subsided.



