

DELAYAN (D.B.)

Foreign bodies in the nose -



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FOREIGN BODIES IN THE NOSE.

A Lecture Delivered at the New York Polyclinic,

BY

D. BRYSON DELAVAN, M.D.

The impaction of a foreign body in the nose is an accident of such common occurrence that most physicians, be their practice general or special, are likely to have had more or less opportunity for the study of cases of this class. The subject is, at the same time, an important one, as well from the severe and even dangerous symptoms which may result, as from the ease with which, as a rule, the difficulty may be remedied.

In dealing with it it will be necessary, first of all, to have a clear idea of the topography of the nasal chambers, together with a correct appreciation of the nature of the soft tissues by which they are lined.

With reference to the former, it must be remembered that the nasal fossa is a canal, wider at the bottom than at the top, and most spacious through those parts known as the inferior and the middle meatus.

Communicating with it are several sinuses, of which the most accessible are the frontal sinus and the antrum of Highmore.

Foreign bodies are, of course, most likely to be found in that part of the canal possessing the greatest diameter. Hence the inferior meatus is their most common place of lodgment. Any object sufficiently small, and capable of locomotion, such as an insect, may find its way into one of the adjacent sinuses. The mucous membrane which lines the nose is particularly delicate in its construction and acute in its sensibility. It is also highly vascular and capable of an extraordinary degree of distension. A foreign body may, therefore, give rise to great irritation, as may also the attempts of the surgeon at its extraction.

The variety of foreign bodies which have been found in the nose is very great. The list comprises extraneous substances, introduced either by accident or design, by infants or insane adults; sequestra of diseased bone; and parasites.

The history is usually as follows: A child of about two years of age, old enough to creep, but not sufficiently intelligent to know better, thrusts some small, rounded object, such as a bean or a shoe button, which he has accidentally found upon the floor, into its nostril. If the child be not caught in the act, the body may escape immediate detection. Soon symptoms of chronic inflammation are established. These are confined to the nostril in which the body is, and continue until it is removed, the irritation often being severe and the discharge extremely fetid. The mucous membrane adjacent to the foreign body is in a condition of superficial erosion; the body, if too firmly impacted to be dislodged by simply blowing the nose, remains fixed until removed by the

presented by the author.



surgeon. Not infrequently the presence of a foreign body passes unsuspected and the child is treated indefinitely for simple catarrh. The writer has seen cases where a body impacted in the nose has been carried for nine, eleven, and in one instance for fourteen years, although in every instance the patients had been under medical treatment. In all cases of fetid catarrh, particularly when confined to one side and dating back to infancy, careful examination with speculum and probe should be made, the nostril having first been thoroughly cleansed by means of a warm douche and the presence of a foreign body excluded before a positive diagnosis is made. In simple cases of foreign body a gentle stream of warm salt water carried through the free nostril and out of the other, or a sternutatory, may succeed. Generally more active measures will be required, when removal must be attempted by means of a hooked probe or a fine forceps. The sensitiveness of the nasal mucous membrane must be borne in mind, and if after two or three gentle and carefully directed efforts success be not attained an anæsthetic should be given and the removal of the body carefully accomplished. If the object be lodged far backward care must be taken in removing it not to push it into the pharynx and thus possibly allow it to fall into the larynx.

Dr. Sajous, of Philadelphia, suggests the following ingenious device: In cases where it is difficult to grasp the object pass a loop of fine wire through the nostril and *below* the body into the pharynx; then pass another similar wire *above* the object. Draw both loops forward to the mouth and attach to each a piece of tape. Draw the tape from behind forwards until the object is included by it, when the latter may be drawn from the nostril as by a similar device a cork is drawn from a bottle.

I desire to call your attention, however, to a method which I have lately employed and which seems superior to any heretofore practiced.

Among the many valuable qualities of cocaine is its well-known power of contracting the blood vessels of the erectile tissue of the turbinated bodies and the nasal septum, and thus of producing the complete collapse of these parts when congested and turgid. Under its influence a nasal canal which is well-nigh impervious will quickly expand until the passage becomes wide, ample, and spacious. Moreover, its action is, in most cases, completely anæsthetic.

To remove the foreign body first cleanse the mucous membrane anterior to it. Then apply thoroughly to the membrane a four-per-cent solution of cocaine, repeating the application if necessary after the lapse of about five minutes. The engorged and thickened tissue will quickly retract, and the passage thus having been widened the body may often be extruded by simply blowing the nose. Should it still be so firmly impacted as to require the use of an instrument its removal will be greatly facilitated by the anæsthesia of the parts as well as by the additional space provided. The copious hemorrhage which commonly results from the old method of extraction, although generally of little moment, is not likely to follow after the use of cocaine.

The site of the foreign body is usually marked by an apparently severe condition of ulceration of the mucous membrane. This appearance is in most cases deceptive. The nostril should be washed several times a day with a weak disinfectant, preferably a solution of the permanganate of potassium. In four or five days the membrane will have healed so completely that often no trace of trouble can be seen; the discharge ceases entirely and cure is complete.

Foreign bodies or inspissated mucus sometimes become the nuclei of the so-called rhinoliths, or nasal calculi, concretions formed by an accumulation of the earthy salts of the nasal secretions. Their presence has not infrequently given rise to so much irritation that the appearances presented have been mistaken for cancer. The history of the case, together with a careful examination with speculum and probe will easily establish the diagnosis. If they are too large to be easily removed they should first be crushed by a lithotrite of proper size. Sequestra of bone, particularly in tertiary syphilis, sometimes remain in the nasal cavity after their separation, thus acting as foreign bodies. They must be thoroughly removed, not only as a preliminary measure to further local treatment, but also because, like any other loose object, they may fall into the larynx, with disastrous results. A case is recorded in which a large section of the vomer escaped during sleep and was drawn into the trachæa.

Foreign bodies of extraordinary size, such for instance as the breech-pin of a gun, have been forced into the nasal cavity from without, and have only been discovered post-mortem after the lapse of several months.

In tropical countries, seldom elsewhere, various kinds of flies, of the order *muscidæ*, may enter the nasal cavity, preferably of a patient suffering from catarrh, and there deposit their eggs.

This distressing condition, although by no means confined to that country, has been met with most frequently in India, where the Hindoo practitioners have given it the name "Peenash." Cases are occasionally reported from our Southern States and from Mexico, while even Massachusetts and Illinois have not escaped. The history is usually as follows: While the individual is sleeping in the open air a fly enters his nose, and, penetrating to a greater or less depth, sometimes even into the frontal sinus, there deposits numerous eggs. These, by the warmth and moisture of their surroundings, are quickly hatched, causing in succession irritability, tickling, and sneezing; later, formication, bloody discharges, and epistaxis, with redness of the face, eyelids, and palate: excruciating pain—generally frontal—insomnia, and, if the condition continue unrelieved, convulsions, coma, and death.

Sometimes the larvæ are sneezed out, or they may be seen on examination of the parts, which, of course, will establish the diagnosis.

The destruction caused by them may extend to the mucous membrane, the cartilages, and even to the bones of the head, the ethmoid, sphenoid, and palate bones having been found carious. The extension of the destructive processes is often very rapid. From the terrible nature of the difficulty, as briefly sketched above, it is evident that the true condition of affairs should be recognized at once,

and that the treatment should be pursued with great promptness and efficiency. The old method consisted in syringing out the offending objects by the aid of various mixtures, prominent among which were solutions of alum, of tobacco, and of camomile, while insufflations of calomel and numerous sternutatories were also used. That these means were entirely inefficient is plain when the impossibility of causing fluids to penetrate the sinuses, and the unfortunate results of the cases so treated, are considered.

Far more rational and scientific is the method proposed for the expulsion of larvæ from remote sinuses by our late distinguished countryman, Dr. John Ellis Blake, and first published by him in *The Boston Medical and Surgical Journal*, April 10, 1862. This consists in the application to the orifice of the sinus of the vapor of chloroform or of ether, preferably the former. The effect of this is to cause the maggots to seek relief from suffocation by escaping with all haste to the outer air, so that they are not only destroyed, but, at the same time, removed. This latter is a most important feature, for, by the old plan, even if the solution used succeeded in destroying their activity, they still remained behind to irritate the parts as foreign bodies and to become probable sources of septic infection. In some cases the simple inhalation of the anæsthetic has been effective; in others, however, a more thorough application seems to have been required, and for these the injection into the nasal cavity of chloroform diluted with water has been recommended.

We would deprecate this latter procedure as both painful and dangerous, and would again urge the value of the drug cocaine, suggesting that it be used as follows: First gently cleanse the nasal space with a mild alkaline solution; then secure complete insensibility and complete retraction of the mucous membrane by means of cocaine, applying it with especial care to the vicinity of the canal leading to the frontal sinus, should that cavity seem to be invaded, in order that the approach to it may become as patent as possible. Finally, allow the chloroform to be inhaled, and, if this do not succeed, place some chloroform in an atomizer and force it into the upper and anterior part of the nasal space in the form of spray.

Besides the larvæ above described, cases, fortunately very rare, are recorded, in which leaches, ascarides, earwigs, and centipedes have been found in the nose, where their presence has caused insomnia, frontal pain, sanious discharge, lachrymation, vomiting, and, in some cases, great cerebral excitement. Sternutatories have generally succeeded in effecting their expulsion. It may be necessary, in extreme cases, to trephine the frontal sinus.

From the personal experience of many of you, as well as from what has been said herein, it is plain that this subject is by no means one of slight importance. In the management of all cases, early recognition of the condition is of the utmost necessity, for not only will much pain, trouble, and expense be spared to the patient, but consequences most serious and even fatal may be averted. Careful and thorough examination of the nasal cavities in all suspected cases therefore, cannot be too urgently insisted upon.

