flammatory reaction in the edge of the muscle extending down from the mastoid process which had been opened.

Of acute labyrinthean disease complicating mastoiditis I have seen only one case; it is, of course, very rare.

I have said nothing with regard to operations of mastoid and sinus, because they belong distinctly to the realm of the otologist. My plea to the general practitioner and to the pediatrist with regard to ear infections in children is that careful routine examination of the ears be made in all cases where fever is present. It cannot be emphasized too often that to the man who treats children, the otoscope is far more necessary than the stethoscope.

113 E. 61st St.

ACUTE MIDDLE EAR INFECTIONS IN CHILDREN FROM THE STANDPOINT OF THE OTOLOGIST.

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The pediatrician and the otologist have one common aim: the prevention of middle ear infection in children. When this desideratum is not obtained their one desire is to restore the patient to his normal state with as little wear and tear upon the auditory apparatus as is possible.

The pediatrician is called upon to treat the acute infections in their early stages, and the otologist as a rule is called upon when operative interference of some sort is necessary. It is not my intention to burden you with a detailed account of the indications for incision of the drum membrane or the mastoid operation, but rather to put before you in a general and very informal way some of the personal impressions and opinions that I have formed after several years devoted to the practice of otology in New York City.

The longer I practice, and have noted the increasing severity of the respiratory infections in children, the more am I impressed as to the advisability of an early incision of an acutely inflamed drum membrane in children. While many cases will undoubtedly subside without this procedure, I think that a properly performed incision of the drum hastens a resolution of the inflammatory process and in many cases with far less damage to the auditory apparatus.

It should be our aim not only to cure the patients but to leave them with an ear which will not give catarrhal trouble in adult life. I believe that many cases of chronic catarrhal otitis media in middle age have their beginning in the oft repeated attacks of acute catarrhal otitis in childhood. I would rather have a healed incision of the membrana tympani than a thickened muco-periosteal lining of the middle ear cavity.

As to the question of irrigation following an incision I think that every case must be decided upon its individual merits. However, I do believe that in any case of acute otitis that is being irritated, and in which there is any question whatsoever of mastoid involvement, it is the duty of the medical attendant to irrigate the case himself once daily, or at least to inspect the ear after irrigation by the nurse or parent that he may see that this procedure has been properly performed. Furthermore I have been imprssed with the necessity of keeping these patients in bed until the otitis has subsided. Children are prone to over do, and to get over tired. Rest in bed is a most important measure in conserving the resistance of the patient.

I am not in favor of the removal of tonsils or adenoids during an attack of acute otitis, in certain cases, however, where the attack hangs on and the persistent discharge is evidently due to an irritated or occluded Eustachian tube, reincision of the drum membrane, together with removal of the tonsils and adenoids may be necessary to effect a cure.

To remove the tonsils and adenoids in an acute case where the possibility of mastoid involvement has not been excluded not only complicates the diagnostic problem, but makes too great a drai upon the resistance of the patient. On the other hand we, all of us, have seen post-operative cases in which the mastoid wound refused to heal until these offending members have been removed.

The uncomplicated case of mastoid involvement in childhood as a rule offers little difficulty either as to its diagnosis or treatment. In the complicated cases the pediatrician and the otologist must walk hand in hand, each is dependent upon the diagnostic findings of the other. "To operate or not to operate that is the question." It should be remembered that roughly about seventy per cent of all the cases of acute otitis, with mastoid symptoms, recover without the mastoid operation. It is a question that requires in the highest degree, common sense, surgical judgment and diagnostic ability.

The mastoid operation should not be considered lightly and should not be advised with the same freedom as is a paracentesis of the drum, neither should it be delayed until irreparable damage has been done to the organ of hearing.

There is no better test of an otologist than the way in which he handles this question of an operation. It might be well to remind the younger members of the section that aside from all ethical motives it is good business to save a patient from an unnecessary operation. A patient saved from a mastoid, results in perpetual gratitude on the part of the parents. If the mastoid operation is once performed a perfect result is taken as a matter of course, and any untoward result, eventuates in criticism of the operator.

It is impossible to discuss fully this important question; but I desire to briefly mention the significance of high temperature and running ears. The otologist is often called upon for an opinion as to whether the ears are the cause of the temperature. The difficulty usually comes in excluding the rest of the body as an etiological factor, and I know that the previous essayist will forgive me if I say that formerly there was a tendency to pin everything on the poor old otologist.

A common type of case seen in consultation is as follows: A child is suffering from an infection of the entire upper respiratory tract, the ears are involved at onset and have been incised. The temperature remains high or is still rising. The ears are discharging freely, but there are no signs of mastoiditis.

Many mistakes have been made in advising operation, relying on the negative findings of the medical man without confirmatory evidence of mastoiditis in the aural examination.

The point I wish to establish is, that in certain cases, for a time at least, causes of high temperature in children cannot be ruled out by the physical examination alone. The pediatrist is less positive than in the past and I think today it is a generally recognized fact that negative findings based upon simple physical examination of the chest do not rule out a pneumonic process. I would hesitate to operate upon a child who had a high temperature and simple running ears, without other confirmatory signs of mastoid or intracranial involvement. The responsibility placed upon the otologist is a heavy one. An X-ray of the chest in these cases may disclose a central pneumonia which gives no physical signs, and the development of an efficient portable apparatus makes it a diagnostic aid which should not be neglected. I would therefore make a plea for the routine use of the X-ray in these cases of upper respiratory infection with high temperature, running ears and negative general findings. If this had been possible in the past many a child would have been saved from the mastoid operation.

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