THE INFLUENZAL EAR.*

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THIS is not a scientific paper, but a retrospect of cases extending over a period of forty years.

At the combined meeting of the sections of War and Otology, which took place on 13th April 1928, I was much surprised to hear it stated that otitis media, whether suppurative or not, when it occurred as a part of, or a sequence of, influenza, need be little noticed, as it usually recovered spontaneously. The experiences quoted below will show that I consider this a very dangerous statement.

Before speaking of the affections just mentioned, it will be well to consider other forms of "influenzal ear" which, being less common, might otherwise be overlooked.

First, I would mention a true nerve deafness, apparently of directly toxic origin and more or less gradual onset, which occurs sometimes in influenza, and resembles that which may occur in or follow mumps, very severe measles, or other of the specific fevers. This, in its initial stage, is often thought to be due to quinine, salicylates, or other medicines used during the febrile stage; but this theory is negatived by its tendency to remain permanently, and by its occurrence when no drugs have been employed. In the course of time many of the patients improve very much, but few recover their former hearing in all its acuteness.

The second class of cases is that in which acute myringitis is present: this may occur without bulging or other evidence of intratympanic tension. Early attention is drawn to it owing to the symptoms of aural pain and dullness of hearing. The membrane will appear bloodshot, red and thickened, and very generally one or more petechiæ, or small intramembranous hæmorrhages, may be seen. Apart from direct injury, such hæmorrhages (traces of which are visible for some months) are evidence of the influenzal origin of the resulting impairment of hearing.

During the earlier influenzal epidemics on many occasions I treated these cases by thorough scarification without cutting

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through the membrane, and afterwards by the application of warm, pure glycerine or glycerine and ichthyol. This was very successful in relieving pain and the hearing was ultimately unimpaired. Such cases need careful watching, as at the first sign of bulging free myringotomy should be carried out.

It is possible that some of the cases, in which hearing is suddenly or very rapidly impaired or lost in influenza, may be due to similar small hæmorrhages occurring in or near the auditory nerve.

The next class of case consists of those in which there is inflammation within the tympanic cavity. So far from these being cases of little consequence and of self-recovery, they are, in my experience, characterised by great severity and gravity. In their prompt, early and energetic treatment lies the hope of the prevention of much deafness and of much mastoid disease, with all its incapacities and dangers. The treatment is based on the sound surgical principle of the prompt and free release of tension. In no case seen and thus relieved *sufficiently early* has the need for a mastoid operation arisen.

The most acute case I have seen was one in which, in the course of an attack of influenza, pain in the ear came on about 7 or 8 A.M. I saw the patient (a lady of about 40) at about 9.30 A.M. and found the tympanic membrane reddened, dull and having lost its normal concavity. I did not incise it, but prescribed treatment. About 1 P.M. I saw it again, when it was of a dark purplish red colour and markedly bulged. Pain was still present.

The patient, who was a guest in a friend's house, had to be moved to a nursing home for operation and for further treatment. Later in the afternoon a general anæsthetic was given and a free incision made through the tympanic membrane. A gush of pus stained with a little blood, following incision, completely filled the meatus (a very wide one) and overflowed slightly into the concha. The pus was swabbed out, antiseptics and a boric fomentation applied, and throughout the stage of healing care was exercised to prevent secondary infection from outside. The principal micro-organism present in the pus was the pneumococcus.

A day or two later the patient developed pneumonia, from which she made a good recovery.

The ear healed well, no mastoid symptoms developed and good hearing was regained.

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If this case had not been dealt with, as it was, a mastoid operation would have been urgently necessary a few hours later.

Another case was that of a boy aged about 8 or 10 who, in the course of influenza, developed acute middle-ear trouble. Soon after the first onset of pain I found the membrane bulged and at once incised it freely. There was no pus present, but a quantity of clear glairy mucus. This ear "leaked like a tap." Clear mucus, sometimes slightly ropy but never purulent, escaped from it apparently at the rate of some ounces a day during a period of about ten days. It saturated a fairly thick pad of wool and invaded the pillow. Very great care was taken to prevent secondary infection. Eventually the discharge ceased; it never became purulent, the membrane healed, and hearing was fully restored.

The tension produced by this abundant secretion would certainly have caused mastoiditis had it not been adequately relieved early, and there would probably have been a secondary infection if the membrane had been left to burst without attention. I also believe that hearing is rarely, if ever, so completely restored after a natural burst of the membrane as after an incision.

In answer to the possible criticism that I am discussing acute middle-ear inflammation rather than influenza, I would reply that the most acute middle-ear cases I have seen have occurred in the course of influenza. Our difficulty as specialists is that we do not as a rule see these cases in a sufficiently early stage to adopt with success what may be termed preventive treatment. I am aware that what I have said may be taken by the advocates of that view to prove their thesis, *i.e.*, that the middle-ear complications of influenza tend to spontaneous recovery. It is true that I have only emphasised the occasional severity of such complications; but the great number of cases are neither seen nor energetically treated early enough, and the results are acute and sometimes fulminating mastoiditis, or rupture of the membrane, acute suppuration, secondary infection. Chronic suppuration and other untoward events are so common as not only to be known to all of us, but to be something of a reproach to our section of the profession.

I have had my full share of all these things, and my experience only confirms me in emphasising the importance and, indeed, urgency of early measures.

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