we have to be on our guard. It must be stopped at the beginning if deafness is to be prevented.

Both catarrhal deafness and deafness with discharge may begin in this way. They are both only the consequence of the extension of inflammation and infection, and are easily and completely arrested, provided they are taken in time. It is later on, when scars and adhesions have occurred, that the ear becomes permanently affected, or when chronic discharge has become established and kept up by polypi, ulceration of the bony walls of the drum cavity, and the like. Then it is that one enters upon the tragedy of lost opportunity. The child has become the victim of chronic deafness which will handicap him throughout his career, or of a chronic suppuration of the ear which, with all its attendant dangers and complications, forms a veritable sword suspended over his head, and liable to fall at any minute. It cannot be borne in mind too persistently that it is in infancy and early childhood that the opportunity of *preventing* the occurrence of deafness by preventing or efficiently removing the adenoid can be seized and acted upon. Many lose this golden opportunity through ignorance; those who lose it with a full knowledge of its importance are unfit to have the care of children, or even to look them in the face.

Those results may be considered as the immediate effects upon the ears, that is to say, they are due actually to the direct action of the adenoids upon the Eustachian tubes and drum cavities. But there are other and more remote results. The infant and child do not develop any ear disease at that period of life, but deafness begins when he is in the young adult stage of his existence. This may be due to one of two things. Either the adenoids have left, after undergoing retrogression at puberty, small scars and bands behind them fastening down and impeding the normal actions of the Eustachian tubes, so that they cannot adequately perform their function, or they have left their mark upon the nasal cavities. The repeated reinfections of the nose from the nasopharynx lead to progressive thickening of the lining membrane and of the turbinates, causing chronic obstruction of the nasal cavities; the cavities may remain permanently narrow from arrested development, or there may be polypi, deformity of the nasal septum, or other obstructions. All these may lead to chronic catarrh and deafness. A large number of these conditions may be prevented by adequate care in infancy and childhood, so that it may be said that prevention in the child means immunity in the adult.

But one could fill a long lecture with adenoids and their effects alone. I think that I have said enough about them to impress upon you their enormous importance in infants and young children. I want to pass on now to other causes of deafness and the means that it is incumbent upon us to take for their prevention and amelioration.

Before doing so, however, there are one or two points about the nose to which attention must be directed.

A discharge from the nose is not uncommon in infants and young children. It should always be seen to by a doctor. When such a discharge is limited to one side, it practically always means that there is a foreign body lodged in one nostril. I am speaking of the child of course. Children are very fond of putting small objects into the nostril; pieces of slate pencil, paper, beads, buttons, pebbles, and the like. When they remain there, they cause irritation and ulceration, leading to discharge. Once the body is removed, the trouble quickly subsides.

When the discharge comes from both sides, it is usually the result of adenoids, but it may be due to other conditions, even to disease of the bones inside the nose, and every case should be at once investigated with a view to appropriate treatment. If it is allowed to go on without interference, it may lead to nasal troubles which may require long, perhaps difficult treatment, or which may become permanent.

Now let us discuss deafness in infants and children from causes other than adenoids. A child may suffer from deafness due to disease of the conducting part of the ear or of the perceptive nerve apparatus. Putting aside entirely the question of deaf birth, which I do not wish to discuss here, the causes of deafness in infants and young children fall into three groups—deafness from meningitis, from the infectious fevers, or from disease beginning in the ear itself. To give you some idea of the relative frequency of these three groups, let me quote figures. Out of 983 cases of acquired deafness in children, meningitis was responsible in 236, or 25.05 per cent.; infective diseases in 360, or 36.6 per cent.; and primary ear disease in 386, or 39.3 per cent.

Meningitis is a very potent cause, and induces deafness by the spread of the inflammation in the brain cavity to the nerve and nerve endings of the auditory nerve. It may occur very early, and many children who are put down as "born deaf" really owe their deafness to meningitis occurring during the first two years of life. Meningitis owns many causes, tubercle,

previous page next page