

the ossicles and drum-head, and a sunken or collapsed state of the latter from external pressure—owing to non-supply of air to the tympanum from partial closure of the Eustachian tube,—subjective noises (tinnitus); and deafness, frequently profound: these are the train of results (chronic aural catarrh) that sooner or later follow a recurrent or confirmed nasopharyngitis; as surely, indeed, as does “abscess” of the middle ear occur in the angina of scarlet fever or measles. Hence the systematic treatment of the nares, pharynx, and Eustachian tubes by the application of astringents, caustics, &c., by nebulizers, insufflators, syringes, gargles, and catheters, has become an integral part of the therapeutics of aural surgery. And it is to be hoped that ere long, through the medium of the profession, the laity will learn that “throat deafness” is none the less certain and serious in its effects because, as a rule, of an insidious and painless character; and that the “stupidity,” thick speech, snuffing, and excessive expectoration, of multitudes of naturally bright children are due to a common cause, a neglected naso-pharyngitis, with resulting tubal and aural catarrh, deafness and “dullness,” and that by timely attention these sources of parental grief and annoyance may generally be made to disappear simultaneously. It is, perhaps, not out of place here to remark that the indiscriminate and self-appointed use of the nasal douche by the myriad sufferers from “catarrh” is injuring many ears, through the inflammation excited by the forcible entry of fluid into the tympanum, caused by the act of swallowing. An intermittent stream of moderate force directed into the open nostril from an enema syringe, or the use of a posterior nares syringe (of which Warner’s is about the best), would be much safer and equally effectual.

The increased responsibility devolved upon the family physician by the advances in otology deserves notice. He is generally in a position to detect aural diseases in their incipient stages, when they are especially amenable to treatment, and long before the integrity of the organ is beyond recovery. Even the casual reference to the presence of subjective noises (tinnitus) should arouse his suspicions, for tinnitus indicates irritation of, or pressure upon, the

labyrinth, and is a common symptom of aural catarrh, often an early one. If, again, in a case of scarlet fever, *e. g.*, it is found that in spite of leeching (if such can be borne), douching, use of air-bag, and treatment of angina, &c., the aural complication is rapidly running into the suppurative form, then a timely puncture or incision of the drum-head (as by a cataract needle with long shank) will evacuate the pus accumulating in the middle ear,—which generally finds vent by spontaneous perforation, ulceration, and loss of the membrane; and following this up by frequent cleansing of the ear by Valsalva’s or Politzer’s method and douching, and the instillation of astringent solutions, as, *e. g.*, sol. zinci sulph. 1 to 5 grs. ad $\mathfrak{z}\text{i}$, *ter die*, and in a few days, if need be, by sol. argent nit. 20 to 80 grs. ad $\mathfrak{z}\text{i}$, daily,—the middle ear can be restored to a healthy state, the perforation becoming closed and the hearing recovered, in from two to six weeks. Whereas, when such cases are neglected and allowed to become chronic, we can never predict—to quote the late Sir William Wilde—“when, where, or how, they will end.” They will, most probably, eventuate at least in loss of part of the drum-head, and adhesion, in whole or part, of the remnant to the promontory, &c., and in permanent impairment of the hearing. It is to be hoped that the laity will soon learn the impropriety of leaving “running” ears to dame Nature for their healing, for the dangers of a do-nothing course are amply attested by the innumerable instances in which, in constitutions vigorous in spite of the drain upon them, the hidden spring continues its foul discharge for ten, twenty, thirty years, deafness supervening, with its attendant disabilities, or possibly premature death from secondary cerebral abscess, &c.

What are the pathological conditions and import of the so-called Otorrhœa (*otitis media purulenta*)? We must premise that the middle ear is, in most cases, the seat of the disease—not the meatus, as is commonly thought. Consider the anatomy and relations of the tympanum: the *cavum tympani* is lined by a modified mucous membrane continuous with that of the Eustachian tube and mastoid cells, which is virtually a periosteum; it is traversed by the facial nerve and contains the delicate ossicles