ORIGINAL CONTRIBUTIONS.

it is not always easy to determine with accuracy as to whether or not the disease is entirely peripheral, or it would be better to say as to whether the symptom of vertigo is due chiefly to a central or peripheral cause. Out of 70 cases, over 20 come under this category, though I am not proposing to give you the numbers of the cases which come under each of my headings, chiefly for the reason that with so small a number the permissible error of proportions is so enormous as to render such figures quite useless. When I referred to the central origin of vertigo as a symptom I referred, of course, to a deficient supply of nourishment being supplied to the vestibular nuclei.

All these cases suffer with deafnes in varying degree, and most of them would find it hard to classify under any other group except that of the chronic progressive middle-ear disease, but I believe the vertigo in all these cases to be distinctly due to the effect of arterio-sclerosis. As examples of the gradual subsidence of the symptom, with its eventual disappearance, I will quote you two cases:

, 1. A male, aged 43. A stockbroker. First visit January 1st, 1908. Slight deafness since January, 1907. Some tinnitus. First attack of vertigo and sickness put right by blue pill (July, 1907): One bad attack beginning in bed in morning. Still slight nystagmus to left. November 22nd two attacks, one on golf course and one after dinner (two have now been after dinner). January, 1908, another severe attack. Blood pressure, 170. December, 1909, no further attack.

The chief points of interest here were—the patient, a man with early arterio-sclerosis, although quite young for that; he lived an extremely strenuous life, carrying always an enormous amount of speculative stock, and working more than hard in attempting to alleviate the conditions of life of those more humble and penurious. His bone conduction was reduced to but a small percentage, about one-fourth of the average. All seemed to me to point to a rapid loss of vitality in the terminal filaments of the right auditory and vestibular nerves. He was told to sell his stock, to go to the country, and to live a quiet, healthy life, with outdoor exercise. The patient in two years lost his vertigo, but he lost his hearing. Incidentally, he preferred this to operation and quick recovery.

2. A female, aged 46. Seen March 20th, 1908. History of tinnitus (right) commenced March. Vertigo one month—six attacks up to the time I saw patient. Seen again in October, 1908. Patient had had 22 attacks in interval, but tinnitus was better By February, 1909, total attacks 38, when they suddenly ceased. December, 1909, caloric test (cold) on right side negative, and rotation test very much reduced. Bone conduction, C. (128) equal 38-25 seconds. Rinné negative. Air conduction C2 to C4.