

*Nystagmus*.—The patient is never conscious of this condition, so this symptom must always be sought for by the surgeon. Pressure on the stapes will produce nystagmus, if the labyrinth is healthy. Bárány has worked out a caloric test for finding out whether a labyrinth is functioning or not. It is this, when syringing a middle ear with cold water, the eyes turn to the opposite side from the disease, and with warm water to the same side as the disease. In gross lesions of the labyrinth, it is impossible to produce nystagmus by heat or cold. Occasionally, following an ordinary radical mastoid operation, we note that nystagmus has developed, vertigo and disturbances of equilibrium. This is due most likely to luxation of the stapes, or injury to the external semicircular canal.

*Vertigo*.—This condition is produced by abnormal stimulation to the specialized end organs in the maculae and cristae of the vestibule and semicircular canals. Deaf mutes and animals who have had their labyrinths removed have no vertigo. Patients suffering with vomiting and vertigo, who have suppuration in the middle ear, is very suggestive of labyrinthine involvement. Cochlear lesions do not produce vertigo. Cochlear disease is manifested by deafness, which is a constant symptom; tinnitus is an occasional symptom.

This labyrinthine giddiness must be differentiated from the giddiness produced by cerebellar disease. This can usually be done by examining the eyes and noting the pulse.

*Rombergism*.—Patient standing on one foot, and eyes shut, sways or falls to the side of the diseased labyrinth.

*Gait*.—The gait is often characteristic. The patient walks with feet widely apart, sways considerably, and has a tendency to go to the affected side.

These symptoms are all marked for a few days when a healthy labyrinth has been interfered with; but when the labyrinth is gradually encroached upon by disease, the change is so gradual that the other organs in the body which contribute to keep perfect equilibrium take on the function of the diseased labyrinth.

Facial paralysis occurring in a case of suppurative otitis media is not uncommonly due to destructive changes in the aqueduct of Fallopius, and would be very suggestive of labyrinthitis.

There is no labyrinthine localization.

The following four cases I have notes of:

1. Tubercular labyrinthitis.

Woman aged 31 years. Suffered from chronic suppurative