

right. Following Alexander, three varieties of intensity are described: A mild nystagmus (third degree) only manifested when the eyeballs are in the extreme lateral position: A strong nystagmus (second degree) easily seen when the eyes are in the central position; finally, a very violent nystagmus (first degree) when the turning of the eyeballs towards the extreme lateral position of the opposite side does not cause it to disappear.

The name, "latent nystagmus," is given to this mild nystagmus of the third degree, which in practice is found to be the most common. This latent nystagmus is developed by fixing the gaze, then turning the eyes towards the extreme right or left, and also by looking into distance with the eyes closed or covered with opaque glasses.

As each semi-circular canal reacts after its own fashion, there are three principal varieties of nystagmus, namely: Horizontal, vertical and rotatory.

In the normal condition there is no spontaneous nystagmus, because Deiter's nucleus is not stimulated, or rather the two nuclei, right and left, are equally stimulated, and hence there results a condition of equilibrium, or muscular tone, which influences equally the ocular muscles of both eyes,—but should this equilibrium be broken, then nystagmus will appear, and naturally to the side on which the muscular tone predominates. Thus, when pus first invades the labyrinth nystagmus appears on the diseased side, owing to the increased tone of this side. Later on, when the labyrinth is destroyed, the muscular tone is lost, and consequently there is nystagmus to the healthy or opposite side. At a still later period, the nystagmus disappears altogether, because the healthy labyrinth reduces its tone by exercising an inhibitory function.

In the discussion of mechanically produced nystagmus, Drs. Lemaitre and Halphen base their deductions entirely on Ewald's experiment, which consisted in plugging a horizontal semi-circular canal with lead, and then through an opening in the bony wall, compressing the endolymph, by means of a syringe, and afterwards withdrawing the piston of the syringe, thereby aspirating the endolymph. In the first instance, the direction of the endolymph was towards the ampulla, causing marked nystagmus to the side examined, and in the second instance towards the arc of the canal away from the ampulla, causing a slight nystagmus to the opposite side. The conclusion arrived at was "the direction of the endolymph in a horizontal semi-circular canal from the arc towards the ampulla is a movement of great physiological importance, as it is accompanied by a sharp nystagmus to the stimulated side; whilst the reverse flow, from the ampulla towards the arc, is a movement of not