Christopher R. Cederroth:

„Nature versus nurture: Genetic considerations in the development of chronic tinnitus“

Tinnitus can be defined as a failure of the brain to adapt to sensory deprivation. This process is often subclinical, occurring occasionally, producing symptoms that eventually relapse after repeated environmental stimuli until becoming permanent. However, while lifestyle and environmental factors may only explain a fraction of the risk of developing tinnitus, genetic predisposition could be a key contributor to the disorder risk. Recently, bilateral and unilateral tinnitus showed opposite trends, the first one being mainly driven by genetics, and the latter resulting mainly from environmental factors, underlying the possibility that various forms of tinnitus may result from various interactions between genes and environment. Understanding how such interactions take place to increase the risk of specific forms of tinnitus will be essential to develop optimal preventive measures since, unlike genetic risk factors, many environmental and lifestyle factors can be modified. Here, I present recent data on environmental and lifestyle factors, with a focus on gene-environment interactions.