Electrophysiologic tests are one of the major investigations in patients suffering from any type of leukodystrophy. These studies are aimed to detect different abnormalities in central and peripheral nervous system. The most widely studied subtypes of leukodystrophy are Krabbe disease, Metachromatic Leukodystrophy, and Adrenoleukodystrophy. Overall, the abnormalities are usually more prominent and widespread in earlier onset cases and as the age of onset increases, the probability of finding abnormal tests in peripheral and central nervous system and the severity of findings decreases.

In this presentation, I will discuss different electrophysiologic abnormalities reported in leukodystrophies, mainly focused on nerve conduction studies and evoked potential abnormalities, relevant clinical findings and their importance as a diagnostic tool.

Keywords: Electrophysiologic test; Leukodystrophy; NCV; Evoked Potential