5-HT2 receptor in Absence Epilepsy

Gabriele Deidda

Neurophysiology Laboratory, Department of Physiology and Biochemistry

Absence Epilepsy is an idiopathic, generalized non-convulsive epilepsy affecting 10 to 17% of all children and adolescents with epilepsy. Absence seizures are the hallmark of absence epilepsy and are characterized by a characteristic spike and wave discharges in the EEG and the concomitant lack of consciousness (the absence). Absence seizures can occur as frequently as 200 times/day with substantial disruption of normal life. Unfortunately, 45% of patients do not achieve full seizure control with mono-therapy of gold-standard anti-absence drugs leading to the need of the therapeutic targets.

In this talk, I'll first provide an introduction of neuro-physiopathological features of absence seizures. Then I'll show data obtained in our Lab obtained in an animal model of absence epilepsy. Our research focuses on the role of the serotonergic system in modulating the neuronal mechanism accounting for absence seizures and aims to find new, safe and rapid clinically translatable therapeutic approach.