IQSEC2-related Disorder

https://pubmed.ncbi.nlm.nih.gov/37761403/

Pathogenic loss-of-function variants in the IQ motif and SEC7 domain containing protein 2 (

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) gene cause intellectual disability with Rett syndrome (RTT)-like features. The aim of this study was to obtain systematic information on the natural history and extra-central nervous system (CNS) manifestations for the Italian

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population (>90%) by using structured family interviews and semi-quantitative questionnaires.

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encephalopathy prevalence estimate was 7.0 to 7.9 × 10

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. Criteria for typical RTT were met in 42.1% of the cases, although psychomotor regression was occasionally evidenced. Genetic diagnosis was occasionally achieved in infancy despite a clinical onset before the first 24 months of life. High severity in both the CNS and extra-CNS manifestations for the

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patients was documented and related to a consistently adverse quality of life. Neurodevelopmental delay was diagnosed before the onset of epilepsy by 1.8 to 2.4 years. An earlier age at menarche in

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female patients was reported. Sleep disturbance was highly prevalent (60 to 77.8%), with mandatory co-sleeping behavior (50% of the female patients) being related to de novo variant origin, younger age, taller height with underweight, better social interaction, and lower life quality impact for the family and friends area. In conclusion, the

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encephalopathy is a rare and likely underdiagnosed developmental encephalopathy leading to an

adverse life quality impact.