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Adult-onset KMT2B-related dystonia

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Introduction: KMT2B-related dystonia (DYT-KMT2B, also known as DYT28) is an autosomal dominant neurological disorder characterized by varying combinations of generalized dystonia, psychomotor developmental delay, mild-to-moderate intellectual disability, and short stature. Disease onset occurs typically before ten years of age [1-3].

We report the clinical and genetic findings of a series of subjects affected by adult-onset dystonia, hearing loss, or intellectual disability carrying rare heterozygous KMT2B variants.

Twelve cases from five unrelated families carrying four rare KMT2B missense variants predicted to impact protein function are described. Seven affected subjects presented with adult-onset focal or segmental dystonia, three developed isolated progressive hearing loss, and one displayed intellectual disability and short stature. Genome-wide DNA methylation profiling allowed to discriminate these adult-onset dystonia cases from controls and early-onset DYT-KMT2B patients [4].

These findings document the relevance of KMT2B variants as a potential genetic determinant of adult-onset dystonia and prompt to further characterize KMT2B carriers investigating non-dystonic features.

References:

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