A homozygous TTN gene variant associated with lethal congenital contracture syndrome.

Chervinsky E¹, Khayat M¹, Soltsman S²,³, Habiballa H⁴, Elpeleg O⁵, Shalev S¹,⁶

Abstract
Pathogenic variants in the TTN gene have been reported to cause various cardiomyopathies and a range of skeletal muscle diseases, collectively known as titinopathies. We evaluated a consanguineous family multiple members affected with a lethal congenital contracture syndrome. Using exome sequencing, we identified a homozygous c.36122delC (p. P12041Lfs*20) variant in exon 167 in the fetal IC isoform of TTN. The finding expands the phenotypes that can be caused by pathogenic variants TTN, which should be considered in lethal congenital contracture syndromes, arthrogryposis multiplex congenita, congenital myopathies, and hydrops fetalis.

KEYWORDS: TTN; arthrogryposis; autosomal recessive; congenital contracture syndrome; fetus; gracile bones; hydrops; lethal

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