Prevalence of TTN mutations in patients with dilated cardiomyopathy: A meta-analysis

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Abstract

A meta-analysis was performed to assess the prevalence of TTN mutations in patients with dilated cardiomyopathy (DCM). Prevalence point estimates and 95% confidence intervals were computed using the logit transformation formula. The prevalence of TTN mutations in patient with DCM, familial dilated cardiomyopathy (FDCM), and sporadic dilated cardiomyopathy (SDCM) was 0.17 (95% CI: 0.14–0.19), 0.23 (95% CI: 0.20–0.26), and 0.16 (95% CI: 0.12–0.21), respectively. No individual study had a marked influence on the pooled prevalence in the meta-analysis. Meta-regression analysis between the logit event for prevalence and sample size explained 32% of between-study variance (p < 0.05). Cumulative meta-analysis confirmed the influence of sample size on the reported prevalence among the different studies. In conclusion, the present analysis suggests that TTN mutations are familial in DCM patients. More attention should be paid to TTN mutations in clinical examinations.

Keywords: Cardiac muscle; Genes; Heart failure; Systematic review; Titin.

Related information

GEO Profiles
Gene
Gene (GeneRIF)
MedGen
Nucleotide (RefSeq)
Nucleotide (RefSeq)
Nucleotide (Weighted)
Protein (RefSeq)
Protein (Weighted)
Taxonomy via GenBank

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