

[Home](#) >> [Pediatric Transplantation](#), Volume 12, Number 2

Danon disease with typical early-onset cardiomyopathy in a male: Focus on a novel LAMP-2 mutation

Authors: Bui, Yen K.¹; Renella, Pierangelo²; Martinez-Agosto, Julian A.³; Verity, Anthony⁴; Madikians, Andranik⁵; Alejos, Juan C.²

Source: [Pediatric Transplantation](#), Volume 12, Number 2, March 2008, pp. 246-250(5)

Publisher: [Wiley-Blackwell](#)

[< previous article](#) | [view table of contents](#) | [next article >](#)

Buy & download fulltext article:

OR

Price: \$48.00 plus tax ([Refund Policy](#))

Abstract:

Bui YK, Renella P, Martinez-Agosto JA, Verity A, Madikians A, Alejos JC. Danon disease with typical early-onset cardiomyopathy in a male: Focus on a novel LAMP-2 mutation.

Pediatr Transplantation 2008. © 2008 Blackwell Munksgaard Abstract:

We report a case of a 16-yr-old male with Danon disease caused by a novel mutation in the LAMP-2 gene. Mutations in the LAMP-2 gene result in the absence of LAMP-2 on immunohistochemical staining of muscle tissue, thus defining Danon disease, a rare X-linked myopathy. It is characterized clinically by HCM or left ventricular hypertrophy, a WPW pattern on ECG, variable degrees of muscular weakness (skeletal myopathy), mental retardation, and retinal changes. The patient presented with severe skeletal muscular weakness and respiratory failure. He also had a history of two OHTs, the first one for severe HCM and the second for allograft rejection. The patient's myopathy was initially presumed to be exclusively related to steroid-induced "critical care myopathy." However, further evaluation with a thigh muscle biopsy revealed autophagic vacuoles with sarcolemmal features suggestive of a lysosomal storage disorder. DNA analysis ultimately identified a previously unreported hemizygous IVS6+3_+6delGAGT splice site deletion mutation in the LAMP-2 gene located within the 5' splice site of intron 6, consistent with Danon disease.

Keywords: [cardiomyopathy](#); [myopathy](#); [lysosomal storage disease](#); [orthotopic heart transplantation](#)

Document Type: Research article

DOI: <http://dx.doi.org/10.1111/j.1399-3046.2007.00874.x>

Affiliations: **1:** Department of Pediatrics, Moffitt Children's Hospital, UCSF, San Francisco, CA **2:** Division of Pediatric Cardiology Mattel Children's Hospital, UCLA Medical Center, Los Angeles, CA **3:** Department of Human Genetics and Division of Medical Genetics, David Geffen School of Medicine, UCLA, Los Angeles, CA **4:** Department of Pathology, David Geffen School of Medicine, UCLA, Los Angeles, CA **5:** Department of Critical Care Medicine, Mattel Children's Hospital, UCLA Medical Center, Los Angeles, CA, USA

Publication date: 2008-03-01

[Related content](#)

Website © 2012 Publishing Technology. Article copyright remains with the publisher, society or author(s) as specified within the article.

