

CASE REPORT**LEFT VENTRICULAR NON-COMPACTION CARDIOMYOPATHY ASSOCIATED WITH CONGENITAL CYTOMEGALOVIRUS INFECTION**

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Abstract: *Left ventricular-noncompaction cardiomyopathy, is a rare and new association with congenital cytomegalovirus infection. It is characterized by distinctive trabeculated or spongy appearing left ventricle associated with left ventricular hypertrophy and systolic/diastolic dysfunction. A 3 months old infant with bilateral cataract, severe respiratory distress and congestive heart failure is described herewith. Serum ELISA of cytomegalovirus (CMV) IgM and IgG were positive. Urine for CMV PCR was positive. Echocardiography revealed grossly hypertrophied noncompacted left ventricle with multiple trabeculations and global left ventricular hypokinesia with moderate tricuspid regurgitation and pulmonary hypertension.*

Keywords: *Left ventricular-noncompaction cardiomyopathy, Congenital CMV, Bilateral cataract.*

References

1. Bennett CE, Freudenberger R. The Current Approach to Diagnosis and Management of Left Ventricular Noncompaction Cardiomyopathy: Review of the Literature. *Cardiol Res Pract* 2016; 2016:5172308. doi: 10.1155/2016/5172308.
2. Dong X, Fan P, Tian T, Yang Y, Xiao Y, Yang K, et al. Recent advancements in the molecular genetics of left ventricular noncompaction cardiomyopathy. *Clin Chim Acta* 2017; 465:40-44.
3. Chin TK, Perloff JK, Williams RG, Jue K, Mohrmann R. Isolated noncompaction of left ventricular myocardium. A study of eight cases. *Circulation* 1990; 82(2):507-513.
4. Hershberger RE, Lindenfeld J, Mestroni L, Seidman CE, Taylor MRG, Towbin JA, Heart Failure Society of America. Genetic evaluation of cardiomyopathy - a Heart Failure Society of America practice guideline. *J Card Fail* 2009; 15(2):83-97.
5. Petersen SE, Selvanayagam JB, Wiesmann F, Robson MD, Francis JM, Anderson RH, et al. Left ventricular non-compaction: insights from cardiovascular magnetic resonance imaging. *J Am Coll Cardiol* 2005; 46(1):101-105.
6. Alhabshan F, Smallhorn JF, Golding F, Musewe N, Freedom RM, Yoo SJ. Extent of myocardial non-compaction: comparison between MRI and echocardiographic evaluation. *Pediatr Radiol* 2005; 35(11):1147-1151.
7. Demir F, Yilmazer MM, Dalli S, Yolbas I, Uluca U, Bilici M, et al. Hypertrophic Cardiomyopathy as a Clinical Component of Congenital Cytomegalovirus Infection. *West Indian Med J* 2015; 65(2):409-411.
8. Zhou J, Liao XH, Wu C, Li J, Xiao R, Cheng C, et al. The synergistic effects of cytomegalovirus IE2 and myocardin on cardiomyocyte hypertrophy. *FEBS Lett* 2011; 585(7):1082-1088. doi:10.1016/j.febslet.2011.03.007.

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