Outcome of Infants and Children with Acute Heart Muscle Disease. Results from centers with no pediatric heart transplantation

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Background

Pediatric acute dilated cardiomyopathy (DCM) is a potentially fatal disease. Heart transplantation (Tx) is utilized to improve survival. However, spontaneous recovery may occur. The prognosis of patients treated in centers with no Tx option was studied.

Methods

A retrospective review of infants and children (≤16 years) who presented with DCM (left ventricular shortening fraction, LVFS ≤ 25%) between 1992 and 2007 at Hadassah and Shaare Zedek Medical Centers was performed.

Results

There were 62 patients, mean age 2.5 years, mean LVFS 16.3% (LVFS<20% in 46 patients). Overall mortality was 27%, which is not different from the mortality reported in centers utilizing Tx (p=0.35). Higher LVFS at presentation (p=0.006) and the use of IVIG (p=0.018) were independently associated with better survival. Recovery (normalization of LVFS) occurred in 57% of survivors. Of the 38 patients who were eligible for Tx according to the AHA guidelines, 22 (58%) survived and 12 (32%) recovered.

Conclusions

This study shows that of patients who may have been Tx recipients in other centers, 58% survived and 32% recovered. These findings may reflect the impact of new anti-inflammatory and anti heart failure medications available. Specifically, our results suggest that the use of IVIG improves survival.