

Left ventricular noncompaction cardiomyopathy: a case follow up with medical treatment

Nguyen Dang Dinh Thi*, Do Thanh Toan*, Le Kim Tuyen**

* General hospital of Khanh Hoa province, ** Heart Institute of Ho Chi Minh city, Vietnam

Introduction

Left ventricular noncompaction cardiomyopathy (LVNC) is a genetic cardiomyopathy characterized by prominent ventricular trabeculations and deep intertrabecular recesses, or sinusoids, in communication with the left ventricular cavity. In many decades, with only morphologic assessment available and no definitive genetic pathway, LVNC remains a diagnostic and management challenge.

Case

- In April 2018, a three-month-old girl went to hospital with shortness of breath and difficulty in breast feeding suddenly.
- She diagnosed with LVNC based on the Jenni criteria.
- Her clinical present with Ross modified classification in stage III.
- Not yet gene evaluation.



History

- Normal of family history.
- Dilated ventricular at 32 week of pregnancy.
- Caesarean at 37 week of pregnancy with 2600 gr.
- Weight gain up 2000 gr in first two months.



Recent Publications

- Bennett C E and Freudemberger R (2016).
Masarone D, Valente F, Rubino M, et al. (2017).
Fujino M, Tsuda E, Hirano K, et al. (2018).
Jenni R, Oechslin E, Schneider J, Attenhofer C, et al. (2001).
Ying Nan Lin, Yu Qiang Wang, Yi Yu, et al. (2014).

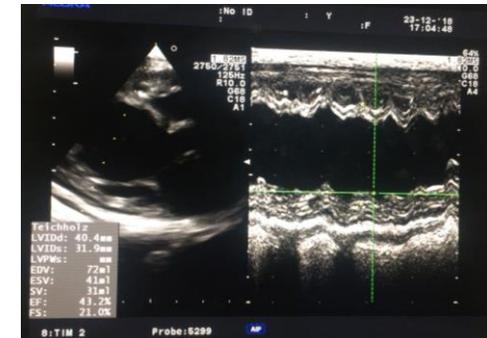
Management

- Captopril oral 0.6 mg/kg q8h everyday.
- Digoxin oral 10 µg/kg/d for a month and Spironolactone oral 1.5 mg/kg q12h only one or two weeks on the first month after diagnosed. We have stopped these medicines when she can bottle-feeding over 120 ml a time.
- After five-month-old, Captopril used only.
- Bottle feeding with breast milk in first 6-month-old because of she could not breast feeding directly.
- Powder milk and traditional foods such as: rice-soup, sea-foods (especially *fishes*), fruits (she loves *oranges*) and all things that she can eat since 7-month-old.
- Vitamins and vitamin D3.



Results

- At 11-month-old, her EF has improved from 33% to 43%.
- Fatigue, malnutrition with 7000 gr in weight.



Conclusion

Our short-term review shows a little improvement in medical treatment. We lack of experience in LVNC treatment. We hope to receive more pay attention from the cardiologist all over the world.