Peripartum Cardiomyopathy

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Introduction

Peripartum cardiomyopathy is a unique form of idiopathic myocardial degeneration and fibrosis associated with congestive cardiac failure that is intimately related to pregnancy.

Case Report

Mrs. NPK, a 26 year old married housewife was admitted on 1st Oct., 2001 to the medical intensive care unit. She was G3P2L2 with 9 months amenorrhoea and complained of acute onset of palpitation and dyspnoea on exertion which had gradually increased over 7-8 days. She was antenatally registered at a peripheral hospital. She had no significant medical or surgical illness in the past. Her EDD was 1st Nov., 2001. On general examination, she was averagely built and had no pallor. There was no cyanosis, icterus, clubbing or lymphadenopathy. Her pulse was 120 bpm, irregular with missed beats and all the peripheral pulses were well felt. The respiratory system showed bilateral basal crepts and there were pansystolic murmurs on auscultation of the heart. Abdominal examination revealed a single full term fetus in vertex presentation. All baseline investigations were within normal range. A 2D echo was done, showing dilated cardiomyopathy with L.V. ejection fraction of 13% (Photograph 1). She was started on digoxin, lasix and injection Cefotaxime. She improved symptomatically and further management was discussed with the anaesthesiologist and cardiologist and it was decided to allow the patient to go in spontaneous labour. Repeat 2D echo done on 3rd Oct., 2001 showed generalised left ventricular hypokinesia, left atrial and left ventricular dilated and left ventricular ejection fraction 15%. On 7th Oct., 2001 she complained of pain in abdomen and vaginal examination showed cervix seven cms dilated and 80% effaced, station +1 and pelvis adequate. The patient delivered a 2.6 kg female child at 10.05 pm on 7th Oct., 2001. There was no third stage complication. The patient was given bed rest and nasal oxygen while digoxin and antibiotics were continued. Baseline haemotological investigations and serum electrolytes

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Department of Obstetris and Gynecology, T.N.M.C. and B.Y.L. Nair Hospital, Mumbai - 400 008. were within normal limits. Electrocardiogram showed ventricular premature beats and ST-T wave changes. The patient improved symptomatically and was continued on digoxin. Repeat 2D echo done on 15th Oct., 2001 showed improvement of ejection fraction to 25%. She was discharged on persistent request on 18th Oct., 2001. She had been advised to follow up at the cardiology and postnatal OPDs regularly.



Photograph 1 : 2D echo showing dilated left ventricle and atrium.

Discussion

Peripartum cardiomyopathy is seen in 1 in 4000 to 5000 livebirths. It is associated with a high mortality rate. Its diagnosis is challenging and requires vigilance About 50 to 60% of patients have spontaneous recovery of cardiac function within six months of the onset¹. The remainder either have persistent ventricular dysfunction or deteriorate to die early or to receive cardiac transplantation². There is a tendency towards recurrence with subsequent pregnancies³.

References:

- 1. Lampert MB, Weinert L, Hibbard J et al. Contractile reserve in patients with peripartum cardiomyopathy and reserved left ventricular function. *Am J Obstet Gynecol* 1997; 176 : 189-95.
- 2. Bertrand F. Post–partum cardiomyopathy: Medical aspects, role of heart transplantation. *Arch Mal Cocur Vaiss* 1995; 88: 1635–40.
- Sutton MS, Cole P, Plappart M. Effects of subsequent pregnancy and left ventricular function in peripartum cardiomyopathy. *Am Heart J* 1991; 121 : 1776-8.