Successful management of pregnancy with primary pulmonary hypertension

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Key words : pregnancy, primary pulmonary hypertension, oxygen therapy

Introduction

Primary pulmonary hypertension is a rare, progressive, and currently incurable disease characterized by an increase in pulmonary hypertension without a demonstrable cause [1]. When associated with pregnancy, the maternal mortality ranges from 30 to 50%. We share our experience about the successful outcome of a pregnancy with primary pulmonary hypertension by intermittent nocturnal nasal oxygen therapy.

Case report

A 32 year old primigravida reported to out patient clinic complaining of exertional dyspnea at 14 weeks of gestation. She was married for 13 months and had spontaneous conception. She was normotensive, with pulse rate 70/ minute and sinus rhythm. Elevated jugular venous pressure (JVP) with features of pulmonary artery hypertension (PAH) was present. Respiratory system was clinically normal. Ultrasonography revealed intrauterine viable pregnancy of 14 weeks gestation. Echocardiography showed enlarged right atrium (RA) and right ventricle (RV), no demonstrable shunts, severe PAH with a pulmonary artery pressure of 74 mm of Hg with adequate left ventricle (LV) function, and mild mitral regurgitation.

Discussion with cardiologist led to the decision to continue pregnancy under close supervision by the team. Past history revealed recurrent syncopal attacks diagnosed 6 years back to be due to primary pulmonary hypertension.

We gave her nicardia, cardace, and low dose aspirin ovally. Intermittent nocturnal oxygen therapy was initiated during hospital stay and was continued at home after discharge following proper patient education.

She reported regularly for antenatal check up and was monitored as high risk pregnancy. At 37 weeks of gestation she developed hypertension with a blood pressure of 200/110 mm of Hg and was hospitalized. Next day lower segment cesarean section was performed under epidural analgesia and a female baby weighing 2.8 kg was delivered with good apgar score. No problems were encountered and nocturnal oxygen therapy was continued postoperatively along with other medication. She was discharged on 10th postoperative day with counseling for contraception. She is on regular follow up with our team. Both the mother and the baby are doing well. She is still on oxygen therapy and is now taking tablet erix (Sidenophil) 50 mg daily and also covance, a vasodilatar. Echocardiogrphy revealed persistent pulmonary hypertention with adequate LV function. At her last check up in July 2004 she was doing well but for exertional dyspnoea and occasional episodes of epistaxis, while the 4 year old child was having normal growth and development.

Discussion

Primary pulmonary hypertention associated with pregnancy carries high maternal mortality. Favorable maternal and fetal outcome may occur with multidisciplinary approach. Declining mortality is attributed to earlier recognition, better understanding of pathophysiology, and improvemement in medical therapy with critical care obstetrics. Nocturnal nasal intermittent positive pressure ventilation (NNIPPV) is used to limit chronic respiratory failure in pulmonary alveolar hyperventilation [2]. Adequate mechanical ventilatory assistance during sleep needs to be maintained throughout pregnancy.

In our case NNIPPV was carried out and vasodilators advocated along with it. Inhaled pulmonary vasodilator and epidural analgesia are recommended for cesarian section [3]. Long term prostacylin therapy appears to have sustained efficacy in this disorder [4,5]. Availability and economical constraints are issues in prostacylin therapy.

Early hospitalization and individually tailored medical treatment prevents worsening of pulmonary hypertention and right heart failure. Pulmonary hypertention is a heterogeneous condition in which life expectancy varies. Pregnancy should be avoided and if it occurs a therapeutic abortion advocated [1].

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Eclampsia in a woman on regular hemodialysis for end stage renal disease with two previous cesarean sections

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Key words : end stage renal disease, hemodialysis, eclampsia

Introduction

We report a case of end stage renal disease with two previous cesarean sections on regular hemodialysis who developed eclampsia.

Case report

A 3rd gravida with 26 weeks gestation was admitted from the casualty on 11th November, 2004 at 6.30 AM for acute diarrhea of one day. She had two cesarean sections earlier. She was apparently normal till two years back, when in April 2002 she developed acute gastroenteritis,