

Pregnancy with Double Cardiac Valve Replacement – A Case Report

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Although pregnancy with heart disease is being increasingly encountered in day to day practice, pregnant women with double cardiac valve replacement are rarely encountered in obstetric practice. Due to the risks associated with anticoagulation, it poses a dilemma and challenge to the treating obstetrician, hence this case is being presented.

Mrs. P, a 21 years old primigravida attended the ANC of Safdarjang Hospital, New Delhi, for registration on 6.8.98. On general examination her B.P. was 90/60 mm/Hg and all other parameters were within normal limits. While examining her C.V.S both heart sounds were loud and there was a systolic murmur in the Mitral area. There was a scar in the sternal area. On enquiry she informed of replacement of 2 cardiac valves in this hospital in June 95. Her past reports revealed that she was a diagnosed case of RHD with severe M.S., mild A.S. and moderate A.R., and had undergone double valve replacement (of mitral and aortic) with prosthetic valves. In this visit she was 14 weeks pregnant with E.D.D. on 1.2.99. She was in NYHA class II and her lungs were clear.

Since her operation, patient was on oral anticoagulants (Acitrom 3 mg O.D.) along with digoxin, frusemide and penidura prophylaxis 3 weekly. She had conceived while on oral anticoagulant: Her routine Hb. and urine were normal. Mrs. P. was advised an USG and also a cardiology consultation. She was put on routine supportive medications besides the drugs she was taking earlier. Patient did not come regularly as advised and reported next at 32 weeks on 14.12.98. At that time, her pulse and B.P. were normal. USG done on 16.12.98 revealed a 31 weeks +5 day foetus with no obvious gross congenital anomaly. She was advised admission at 36 weeks for switching over to Inj. Heparin, but got admitted on 18.1.99 at 38 weeks gestation.

After admission, in consultation with the cardiologist, her necessary base line investigations were carried out including complete haemogram with platelet count, coagulation profile, including prothrombin time and blood group with Rh typing. Her oral anticoagulant was stopped and heparin infusion started at the rate of 500 units per hour on 20.01.99. Digoxin and frusemide were continued as before. Heparin therapy was monitored with daily APTT estimation and as APTT increased to 1.5 times the control, the rate of infusion was increased to 1000 units per hour and was maintained on this. Her pelvic assessment was carried out, inj. Protamine and one unit of blood was arranged. Paediatricians were informed about this case.

She went into labour on 30.1.99 at 1.00 p.m. Her pulse, B.P. and respiration were all normal. Heparin was stopped and prophylactic i/v antibiotics started. As her contractions were not good a concentrated oxytocin drip was started. Patient delivered vaginally at 7.10 p.m. on 31.1.99, a 2.6 kg normal baby, with episiotomy. There was mild atonic PPH, which was managed conservatively. Baby was transferred to nursery for observation and sent back to the mother after 24 hours.

After ensuring complete haemostasis, Heparin infusion was restarted 4 hours after delivery, @1000 units/hour. Oral anticoagulant was started 24 hours after delivery in the dose as before. Simultaneously monitoring with PT was started. On 2nd day of delivery heparin infusion was substituted by S/C Heparin in the dose of 12500 units B.D., and as PT began to increase, dose of heparin was reduced to 6000 units B.D. for the next 48 hours. Four days after delivery Heparin was totally stopped. She was allowed to breast feed and discharged on 8th post-natal day. Patient came for post natal check up after 3 weeks.