Neuroleptic Malignant Syndrome Complicating - A Case of Post Partum Psychosis

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Mrs. G.B. a 25 year old multiparous lady was referred on 5.5.98 at 12:30 noon from a peripheral maternity centre, with 35.5 weeks amenorrhoea and pregnancy induced hypertension. She had developed generalized edema since two weeks and headache since two days. Her blood pressure remained uncontrolled with alpha methyl dopa started two weeks prior. There were no significant medical or surgical illnesses in the past.

On admission her general condition was moderate. She was afebrile with a pulse of 100/min, B.P. 160/106 mm Hg, anasarca, mild anemia, no hepatosplenomegaly and no exaggerated deep tendon reflexes. She had a singleton pregnancy of 28 weeks indicating severe intrauterine growth retardation, since she had good dating. Per vaginal examination finding was a closed tubular posterior cervix. A urine examination showed 3+ albuminuria. A baseline haemogram, liver and renal function tests and coagulation profile were within normal limits. Ultrasonography showed a viable singleton pregnancy of 28 weeks gestation with asymmetrical IUGR and no obvious congenital abnormalities. Fundoscopy examination was normal. However two consecutive non stress tests were equivocal with baseline FHR 146 beats/min with a beat to beat variability of less than 5 per minute. A Doppler study of S/D ratio was 3.2. In view of severe pregnancy induced hypertension and severe IUGR, a decision to proceed with caesarean section was made. A 1044 gm male baby was delivered by lower segment caesarean section on 7/5/98 at 2:35 AM. Apgar score was good at birth and the baby was transferred to the neonatal intensive care unit. The patient recovered uneventfully during post operative period. She was gradually normotensive and tapered off antihypertensives. However on the 10th post operative day she developed acute puerperal psychosis. All baseline urine and blood investigations including a culture were normal. A high vaginal swab showed no bacterial growth on culture. A widal test and peripheral smear for malarial parasites were negative, X-ray chest, USG of abdomen and pelvis were found normal. A physician's opinion to exclude organic causes was taken. A CT scan of brain was normal and CSF analysis from lumber puncture was not significant. After a psychiatric referral the patient was started on Inj. Serenace 5 mg IM 12 hourly and Inj.Phenargan 25 mg IM 12 hourly. She was also given Inj. Ceftriaxone and Inj. Amikacin for 5 days. Following 6 days after anti-psychotics the patient deteriorated clinically. She had persistant hyperthermia in a range of 102° to 103° F with tachycardia and labile hypertension. She also developed muscular rigidity and incontinence of urine and stools. She was given a course of chloroquine and quinine empirically. However she continued to have the same symptoms with increasing severity and was shifted to the medical intensive care unit.

In view of all investigations for organic cause being normal, a persistant hyperthermia and autonomic dysfunction, a probable diagnosis of Neuroleptic malignant syndrome was made. This was a complication following phenothiazine therapy for post partum psychosis. A grossly elevated CPK level of 1636 IU/L reinforced the diagnosis. Inj. Serenace was discontinued. The patient was started on tepid sponging, tablet Dantrolene sodium and tablet Bromocryptine with supportive measures.

Within 48-72 hours the patient stopped febrile episodes, regained consciousness and orientation and improved symptomatically. She was discharged after two weeks of therapy with her baby and asked to follow up in the post natal clinic.

Neuroleptic malignant syndrome is a known but uncommon complication of antipsychotictherapy. However, the clinical dilemma in our case was to rule out septic foci in puerperal pyrexia which was done on a war footing.