

## Obstetric management of severe pre eclampsia - eclampsia remote from term

The Obstetric management of severe pre eclampsia - eclampsia at 32 to 34 weeks of gestation and beyond is always been challenging, apart from literature and standard text books which advocate individualisation of the management, certain protocols need to be discussed and be implemented, based on the assumption that only a tertiary care and multidisciplinary team can meet this challenge.

The Obstetric management of severe pre eclampsia - eclampsia involves earliest delivery of the fetoplacental unit, which is the treatment part for pre eclampsia. The convulsion to delivery interval should be minimised to improve the maternal and perinatal outcome. The cases of severe pre eclampsia - eclampsia at 32 to 34 weeks gestation are challenging because the fetus is viable at this gestational age and level 3 and 4 NICU set up will dictate our route of delivery as is the availability of obstetric ICU with Internist with Cardiologist, Nephrologist in attendance with an experienced Anaesthetist.

Induction of labour with Mesoprostol, when the patient is not in labour will increase the induction to delivery interval and may lead to maternal and fetal morbidity and mortality. The emergency caesarian section in cases of stabilised eclampsia not in labour and elective caesarian section in cases of severe pre eclampsia is a very effective modality to reduce the convulsion to delivery interval and improve the maternal and fetal outcomes. The objectively measured maternal outcomes are preventing CVA, ARDS, ARF, HELLP syndrome and abruption placentae. The objectively measured fetal outcomes would be prevention of HIE, intrapartum birth asphyxia and intra uterine death<sup>1</sup>.

A pre anaesthetic check up prior to Caesarian section is mandatory. Also a failed intubation drill should be done. The regional anaesthesia is preferred, epidural, spinal in that order. Prophylactic Heparin in the form of low molecular weight heparin [LMWH] should be given post operatively in the dose of 1mg/kg body weight, for prevention of deep vein thrombosis [DVT] and acute pulmonary embolism. Also post operative eclamptic convulsions should be evaluated by CT, MRI and managed by neurologist, to diagnose Posterior reversible encephalopathy syndrome (PRES) and cortical venous thrombosis. Strict attention must be given to fluid and electrolyte balance. Patient should be ambulated early with deep breathing exercises to prevent DVT and pulmonary embolism<sup>2,3,4</sup>.

If the patient is in labour induction, start with Mesoprostol per vaginally 50 mcg stat followed by 25 mcg 4th hourly upto a maximum of 150 mcg is advocated, this protocol will optimise maternal and fetal outcome. This is far superior to induction with Oxytocin and or Dinoprostone gel.

### Key Recommendations:

- Cases of severe pre eclampsia - eclampsia presenting remote from term 32 to 34 weeks gestation, elective or emergency caesarian section is a safe alternative to induction of labour when the patient is not in labour.
- Complete blood picture, Liver function tests, serum creatinine and ultra sound are the specific investigations to be done.
- A pre anaesthetic check up should be done.
- An internist should also evaluate the patient.
- A failed intubation drill is done by anaesthetists.
- Blood bank should be alerted for packed cells, fresh frozen plasma and SDP if there is any need.
- These cases should be done only in a tertiary institute.
- Alert the NICU consultants.
- There is a role of induction and acceleration of labour if the patient has a good Bishop score and favourable pelvis.
- Labour should be monitored partographically.
- In cases where Caesarian section is done prophylactic LMWH should be given.
- Post operative convulsions should be evaluated by CT and MRI.

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