Hypertensive disorders of pregnancy II

Complication of severe pre-eclampsia are:

- Eclampsia
- HELLP syndrome
- DIC
- ARDS
- Pulmonary oedema
- Acute renal failure
- Placental abruption
- Intrauterine growth restriction (IUGR)
- Intrauterine fetal death

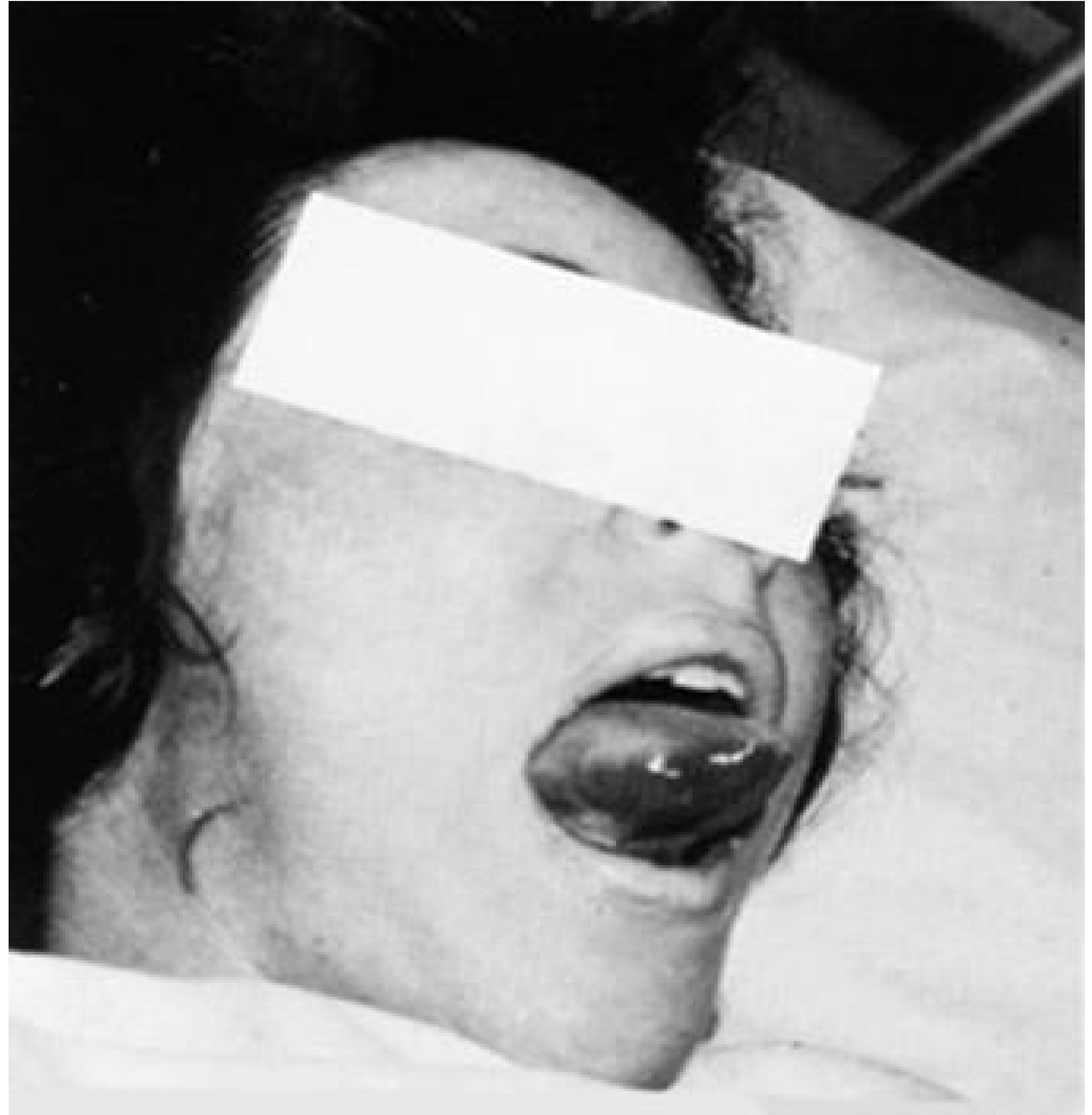
Eclampsia:

- defined as new-onset tonic-clonic seizure in an otherwise healthy woman with hypertensive disorder of pregnancy

- 44% occur postnatally, 38% antepartum & 18% intrapartum.

- The pathophysiology

•is associated with high maternal and neonatal morbidity and mortality.



Management:

- General measures:
  - Do not leave the patient alone
  - Call for help
  - Inform consultant
  - Prevent maternal injury during convulsion

- Air way:
- Breathing:
- Circulation:
- Secure intravenous access
- Urinary catheter to assess urinary out put
- Fluid input/output chart

anticonvulsant therapy

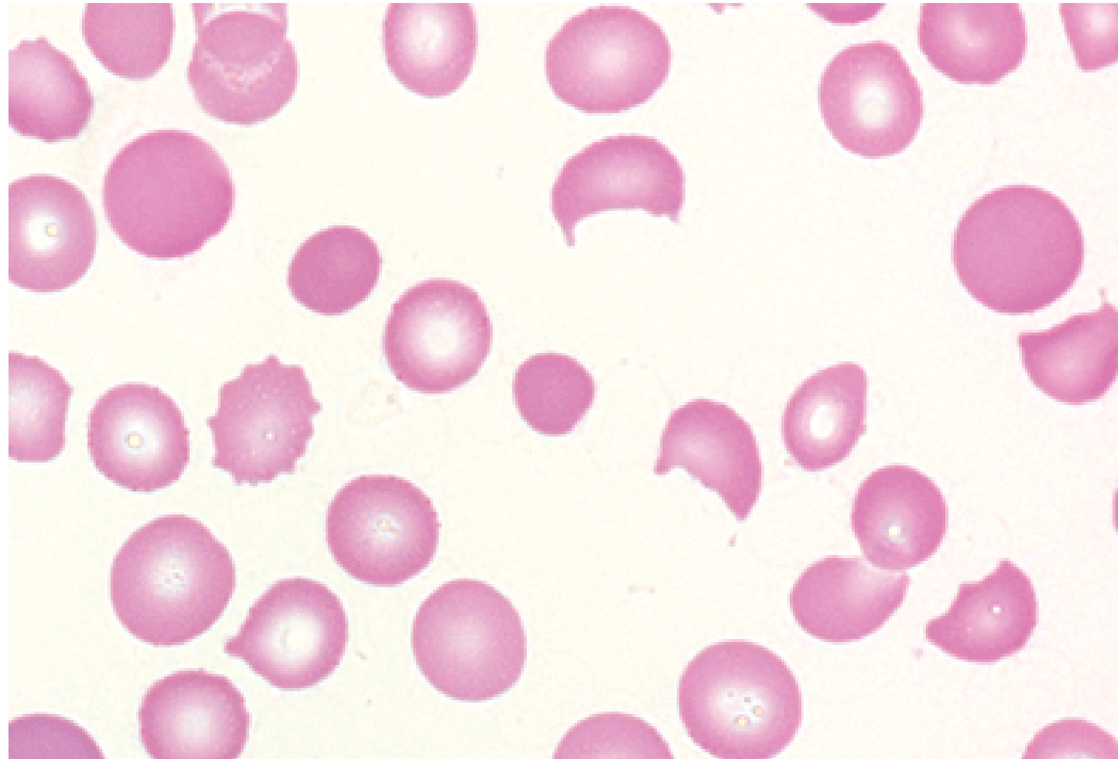
- Magnesium sulphate: membrane stabilizer & vasodilator & reduces intracerebral ischaemia

signs of magnesium toxicity

- loss of deep tendon reflexes
- respiratory depression
- cardiac standstill.
- So, the patient should be monitored hourly by patellar reflex, respiratory rate & oxygen saturation.

- BP should be controlled using intravenous hydralazin or labetolol
- Delivery
- Postpartum care
- Transfusion of red cells, platelets, fresh frozen plasma and cryoprecipitate or fibrinogen concentrate are required as indicated clinically and by blood and coagulation tests.

- **HELLP Syndrome:** the association of haemolysis (H) elevated liver enzymes (EL) & low platelet count (LP)
- DIC with low fibrinogen may coexist.



- **Definitive treatment of severe pre-eclampsia and HELLP requires delivery of the fetus**
- **dexamethasone can reduce the risk of respiratory distress in the newborn and reduce liver enzymes and possibly the risk of adult respiratory distress syndrome in the mother.**

Chronic Hypertension:

- 2-4 % of pregnant women. Over 90% of cases are due to essential hypertension
- causes of chronic hypertension (secondary) include:
- Chronic renal disease
- Renal artery stenosis
- Coarctation of the aorta
- Collagen vascular disease
- Pheochromocytoma
- Cushing's syndrome
- Conn's syndrome

High-risk characteristics in women with CHT include:

- Maternal age >40 years
- Duration of hypertension > 15 years
- BP ≥160/110 mmHg
- Diabetes
- Renal disease
- Cardiomyopathy
- Connective tissue disease
- Coarctation of the aorta
- Previous pregnancy with perinatal loss

Preconception assessment & councelling:

- life style modification
- anti-hypertensive therapy: diuretics & ACE inhibitors are changed
- Physical examination
- Investigations:

renal function test,

urinalysis,

24 h urine collection for protein excretion

creatinine clearance

CXR

ECG

echocardiography

Complications of CHT

- Superimposed PE
- Abruptio placentae

Antihypertensive therapy: reduces the risk of severe hypertension but does not reduce the risk of superimposed PE, preterm delivery or perinatal death