Hypertension in Pregnancy

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Introduction

- Spectrum of disorders ranging from gestational proteinuria to severe PET to HELLP/eclampsia
- Insidious in onset and unpredictable
- Aetiology unknown

CEMACH

- Hypertension commonest medical problem
- Common direct cause of maternal death

Risk Factors

- Age
- Obesity
- Family History
- Obstetric history (multiple pregnancy, primip, previous PET)
- Medical History

Hypertensive disorders

- **Start Aspirin**
- Hypertensive disease in prev preg
- Type 1or 2 diabetes
- Chronic hypertension
- Renal disease
- Autoimmune disease e.g. SLE

1st trimester

- Stop ACE inhibitors/ARB
- Keep BP lower than 150/100
- Regular monitoring BP/urine
- Consider calcium

Investigations first trimester

- ECG
- Renal US scan
- Baseline PCR
- Baseline PET bloods
- Uterine artery dopplers
- Serial growth scans
- Home urine dipstick from 22-24 weeks

Symptoms

- Headache
- Epigastric/RUQ tenderness
- Oedema
- Visual disturbance
- Nausea/Vomiting

Classification

- **Mild hypertension(140/90 to149/99 mmHg)**
- **Moderate hypertension(150/100 to159/109 mmHg)**
- **Severe hypertension(>160/110 mmHg)**

Mild Hypertension

- Do not admit
- Do not treat
- Measure not more than once per week
- Urine spot dipstick or PCR
- No additional blood tests

Moderate Hypertension

- Do not admit
- Treat with oral labetolol – keep systolic <150, diastolic 80-100
- Measure twice per week
- Urine spot dipstick or PCR
- Baseline PET bloods
- No additional blood tests if BP stable/neg protein

Severe Hypertension

- Admit
- Treat with oral labetolol – keep systolic <150, diastolic 80-100
- Measure at least four times per day
- Urine spot dipstick or PCR
- Baseline PET bloods
- Weekly blood tests if BP stable/neg protein

Signs

- Pregnancy-induced hypertension
- New onset proteinuria
- Rapidly progressive oedema
- Epigastric/RUQ tenderness
- Convulsions, mental disorientation
- IUGR/IUD
- Placental abruption

Crises in Pre-eclampsia

- Eclampsia
- HELLP syndrome
- Pulmonary oedema
- Placental abruption
- Cerebral haemorrhage
- Cortical blindness
- DIC
- Renal failure
- Hepatic rupture

Postnatal

- Ensure return to normal renal function
- Monitor LFTS if abnormal
- Stop aspirin if not stopped already
- Start amlodipine/atenolol
- Consider ACE if not breastfeeding
- Monitor BP

References

- NICE guideline nice.org.uk
- Handbook of obstetric medicine Cathy Nelson-Piercy
- Hypertensive disorders of pregnancy: a UK-based perspective.Manju Chandiramani and Andrew Shennan. Current Opinion in Obstetrics and Gynecology 2008,
- Future Cardiol. 2010 Jul ;6 (4):535-46

Options and decision-making: hypertensive disorders of pregnancy.

Manju Chandiramani, Karen Joash, Andrew H Shennan

Diabetes

- Preconception counselling vital
- Increase miscarriage rate
- Start Folic Acid 5mg
- Start aspirin 75mg in type 1 and 2
- Seen regularly in the hospital – consultant led care
- Continue metformin

Diabetes postnatal

- If GDM increased lifelong risk of diabetes
- Monitor annually
- Lifestyle measures
- Postnatal GTT vital!

Thank you

- Questions later