TYGERBERG HOSPITAL
Department of Obstetrics and Gynaecology: General Specialist Services

PROTOCOL FOR THE MANAGEMENT OF HYPERTENSIVE DISORDERS IN PREGNANCY
(BASED ON THE ACCREDITED PROVINCIAL GUIDELINE FOR PREGNANCY HYPERTENSION)

A. DEFINITIONS

Hypertension in pregnancy:

Diastolic blood pressure: ≥ 90mmHg but < 110mmHg on two occasions, taken at least 4 hours apart, or a single measurement of ≥ 110mmHg

Systolic blood pressure: ≥ 140mmHg is also indicative of hypertension - even in the absence of a raised diastolic blood pressure, it should be regarded (and managed) as significant hypertension.

NB! *For the purpose of this protocol (in the absence of diastolic BP ≥ 90mmHg): manage a systolic blood pressure of 140-159mmHg the same as for a diastolic blood pressure of 90-109mmHg; and for a systolic BP ≥ 160mmHg the same emergency management is done as for a diastolic BP≥110mmHg*

Significant proteinuria:

2+ on diagnostic strips on two occasions, taken at least 4 hours apart

or ≥ 0.3 gram protein in a 24 hour urine collection.

Chronic Hypertension: Hypertension that is present before 20w of gestation or if the woman was already taking antihypertensive medication before pregnancy.

Gestational Hypertension: New hypertension presenting only after 20w of gestation without significant proteinuria.

Pre-eclampsia: New hypertension with significant proteinuria developing for the first time after 20w of gestation.

Eclampsia: Convulsions occurring with preeclampsia.

NB! *HOW IS A BLOOD PRESSURE TAKEN IN PREGNANCY?*

- Use correct cuff size (length of 1.5 times the circumference of the arm)
- Use obese cuff (15x33cm) if the middle upper arm circumference is > 33cm
- Patient may sit or lie on her side – Never supine!
- Cuff should be on the level of the heart
- Use Korotkoff 5 sound (sound disappears) to determine diastolic value

Summary of hypertensive disorders in pregnancy

	Chronic Hypertension	Gestational Hypertension (Section B)	Gestational Proteinuria (Section B)	Acute Severe Hypertension (Section E)	Preeclampsia (Section D)
Definition	Hypertension before 20w, On treatment at booking	New onset hypertension after 20w	New onset significant proteinuria after 20w	Systolic BP ≥ 160 Diastolic BP ≥ 110	New onset hypertension & significant proteinuria after 20w
Antenatal Care					
Maternal Evaluation	Creatinine, Review Rx, If proteinuria do 24h DUP	Bp Control. If proteinuria refer to pre-eclampsia	Urine Culture, 24h DUP, Renal work-up	Creatinine, Hb, Plt, AST	Creatinine, Hb, PLt (AST,LDH , t-Billi if low plts), 24h DUP
Fetal Evaluation	Doppler after 24w, SF growth	Doppler after 24w, SF Growth	SF Growth	CTG if viable	Formal US with full Dopplers CTG if viable
Treatment	Convert to α-methyl dopa	α-methyl dopa	AB if urine culture positive	Acute Nifedipine 10mg PO & Labetolol IV (if needed) Maintenance Adalat XL	Adalat XL if needed
Admit to Hospital	No	If BP ≥ 160/110	Yes, admit to antenatal ward for work-up	Yes, admit to emergency centre	Yes, admit to emergency centre
Measure Blood Pressure	At each clinic visit	Weekly	4-hourly Blood pressure profile for 24h	Every 10-30min until stabilised thereafter hourly for 12-hours	4-hourly provided no ASHT
Delivery Plan					
	Delivery at 40w0d if uncomplicated	Delivery at 40w0d if uncomplicated & no co-morbidities #	Await spontaneous labour	Individualise depending on BP control and gestation	If mild - Delivery at 36w0d If severe - Delivery at 34wod
Recurrence					
	100%	30-50%	No data	No data	If severe 40% If Mild 15%

If ASHT, on ≥ 2 anti-HT drugs or any complications /organ dysfunction then for delivery by 38w0d.

B. MANAGEMENT: ANTENATAL CLINIC: ASYMPTOMATIC PATIENT

1. Asymptomatic moderately hypertensive patient with no proteinuria

Diastolic BP ≥ 90mmHg but < 110mmHg [or Systolic BP ≥ 140mmHg but < 160mmHg]

1.1. Repeat blood pressure after resting for at least 4 hours but within two days, as an outpatient

1.2. If still ≥ 90mmHg but < 110mmHg [or systolic BP still 140-159mmHg]

- Start treatment with α-methyl dopa 500mg orally 8 hourly
- Make note on antenatal chart and make patient level 1 (shared care/doctor's clinic) risk and review within 1 week to ensure BP control and no new proteinuria.

1.3. Do Umbilical Artery Doppler test, if gestation ≥ 24 weeks.

- If the Doppler is normal and the blood pressure is controlled, refer to the appropriate shared care/doctor's clinic with the following advice:
  - *Book for delivery at 38w0d at a district hospital*
  - *Follow up is every two weeks until 34 weeks, then every week*
  - *Maintain diastolic blood pressure at 90 -100mmHg*

1.4. If blood pressure uncontrolled (diastolic BP > 100mmHg but < 110mmHg) and no new proteinuria increase α-methyl dopa to 750mg orally 8 hourly and review in 1 week.

1.5. If blood pressure still uncontrolled (diastolic BP > 100mmHg but < 110mmHg) and no new proteinuria then review the patient with your consultant. If appropriate add a second antihypertensive agent, Adalat XL 30mg daily. Review the patient in 1 week. (In this manner Adalat XL can be increased to a twice daily dosage)

- If the blood pressure is controlled then these patients care should include:
  - *Delivery by 40w0d if uncomplicated and no ASHT.*
  - *Follow up is every two weeks until 34 weeks, then every week*
  - *Maintain diastolic blood pressure at 90 -100mmHg*

1.6. If the blood pressure is still uncontrolled (diastolic BP > 100mmHg but < 110mmHg) and no new proteinuria refer to Special Care / Maternal Medicine for opinion on further management, possible third line antihypertensive drug or delivery.

1.7. If at any stage new onset proteinuria is noted refer to Point 2 below.

2. Asymptomatic moderately hypertensive patient with proteinuria ≥ 1+

Diastolic BP ≥ 90mmHg but < 110mmHg [or Systolic BP ≥ 140mmHg but < 160mmHg]

2.1. **Admit to the antenatal ward (F2)**, do serum creatinine, haemoglobin, platelet count and Doppler [if gestation ≥ 24 weeks].

- Verify blood pressure again after 4 hours
- Start treatment with α-methyl dopa 500mg 8 hourly if BP still high

- Write up additional Nifedipine 10 mg orally, for every time the diastolic blood pressure rises to ≥110mmHg or systolic blood pressure rises to ≥160mmHg with instructions to the nursing staff that the doctor must be informed about the administration of Nifedipine.
- Do a 24h Urine collection if persistent proteinuria of ≥ 1+

NB! Rather *consider IOL if gestation ≥ 38 weeks if suggestive of pre-eclampsia and omit proteinuria quantification.*

2.2. If the blood pressure is well controlled, and there are NO signs of pre-eclampsia (and no significant proteinuria), the patient can be discharged:

- If the general work up was done and no end organ damage was found.
- Make appropriate notes on the antenatal chart and make patient level 1 (Shared care)
  - *Book for delivery at 38w0d at a district hospital*
  - *Follow up is every two weeks until 34 weeks, then every week*
  - *Try to maintain diastolic blood pressure at 90 -100mmHg*

2.3. If the blood pressure is uncontrolled (diastolic BP > 100mmHg but < 110mmHg) and no new proteinuria manage the patient as set out above in Point 1.

TAKE NOTE! → *If significant proteinuria is present, manage further as for pre-eclampsia (see Section D)*

3. Normotensive patients with new onset proteinuria:

3.1. **Asymptomatic patient with normal blood pressure but with new onset 1+ proteinuria after 20 weeks at her local clinic/MOU**

- Manage as outpatient (level 1 / district doctor)
- Exclude urinary tract infection (Send urine for Culture)
- Follow up in 2-3 days - Check the result of the urine culture and if no urinary tract infection and still 1+ proteinuria and normal blood pressure, do 24-hour urine protein quantification as an outpatient. Phone the patient the next day with the result and advise on further management.
- If significant (>0.3g protein / 24 hours), admit to antenatal ward F2, for BP profile and workup for chronic renal disease (Renal Ultrasound etc.)
- Do twice weekly blood pressure monitoring (at local clinic)
- If hypertensive refer to Section 2 above

3.2. **Asymptomatic patient with normal blood pressure but with new onset ≥ 1+ proteinuria after 20 weeks at High Risk Clinic**

- If history of previous adverse pregnancy outcome and 2+ proteinuria then rather admit to antenatal ward F2, for BP profile and 24-hour protein quantification.

- If no history of previous adverse pregnancy outcome then recheck the blood pressure in 4 hours.
- Exclude urinary tract infection (Send urine for Culture)
- Follow up in 2 days - Check the result of the urine culture and <u>if no urinary tract infection</u> and still ≥ 1+ proteinuria and normal blood pressure, do 24-hour urine protein quantification as an outpatient. Phone the patient the next day with the result and advise on further management.
- If significant (>0.3g protein / 24 hours) and still normotensive, workup for chronic renal disease (Renal Ultrasound etc.)
- Do twice-weekly blood pressure monitoring (at local clinic) as these patients are at increased risk for developing preeclampsia. (40-50% of these patient will develop pre-eclampsia)
- If hypertensive refer to Section D.

C. <u>MANAGEMENT: ANTENATAL CLINIC: SYMPTOMATIC PATIENT</u>

1. Symptomatic patient with hypertension [Diastolic BP ≥ 90mmHg or systolic BP ≥ 140mmHg] <u>with signs of threatening eclampsia</u> (severe headache, visual disturbances, epigastric or liver tenderness, increased reflexes)

1.1. **Give Magnesium Sulphate** (see protocol) and **admit to the emergency centre (labour ward, C2A)**.

1.2. If acute severe hypertension include Section E management.

1.3. In labour ward: insert urinary catheter, site intravenous line on with Ringer's Lactate Solution and control the IV fluid flow at 80ml/hour

1.4. Continue with MgSO4 if patient still has threatening signs

1.5. Manage further as for pre-eclampsia (Section D)

D. <u>MANAGEMENT: ANTENATAL: PRE-ECLAMPSIA PATIENT</u>

1. Management of antenatal pre-eclampsia

1.1. Confirm diagnosis of pre-eclampsia and admit to labour ward

1.2. Do Creatinine, Haemoglobin and Platelet count. If platelet count is $<100x10^9$, ask for LDH and AST as well. Ensure that these results are reviewed as soon as possible.

1.3. Asses fetal condition: Formal ultrasound with full Dopplers as soon as available - while awaiting this assess condition with CTG (if viable – you may need to do an informal scan for EFW to decide on viability and management)

1.4. Then manage according to gestation -

1.5. **<u>Sure Gestation ≥ 36 weeks:</u>**

[If unsure gestation an EFW of ≥ 2.2 kg]

- Delivery irrespective of severity of pre-eclampsia.

1.6. **Sure Gestation ≥ 34 weeks but < 36 weeks:**

[If unsure gestation an EFW of ≥ 1.8kg but < 2.2kg]

- Stabilise patient, control BP
- Plan for delivery if severe/complicated pre-eclampsia.
- Expectant management can be considered under consultant guidance if mild-moderate pre-eclampsia

1.7. **Sure Gestation ≥ 27 weeks but < 34 weeks:**

[If unsure gestation an EFW of ≥ 800g but < 1.8kg]

- Stabilise patient, control BP
- Consider magnesium sulphate (see protocol)
- Start antenatal corticosteroids administration a.s.a.p. (see protocol)
- 6 Hourly CTG
- Work up for possible conservative management and referral to Special Care/Maternal Medicine (discuss all findings with consultant first to determine whether urgent delivery is rather indicated)

NB!	*Evaluate these patients for urgent Special Care/Maternal Medicine opinion. Assessment must include a full maternal examination, 24-hour urine protein excretion, CTG (if viable) and full fetal ultrasound and Doppler evaluation. Do not delay referral due to outstanding 24-hour urine collection results!*

1.8. **Sure Gestation ≥24 weeks but <27 weeks:**

[If unsure gestation an EFW of ≥ 550g but < 800g]

- This patient will need an urgent L3 (Special Care Registrar) opinion on further management or termination of pregnancy. [Weekdays 08h00-22h00, Weekends 08h00-14h00]
- Follow the orders from the special care unit after referral

1.9. **Sure Gestation <24 weeks:**

[If unsure gestation an EFW of < 550g]

- Exclude molar pregnancy, multi-fetal pregnancy (sonar)
- Advise termination of pregnancy for severe maternal disease (two doctors needed for this decision, one must be a consultant). Complete Annexure A & C of the TOP forms.

2. Management of eclampsia

2.1. Call for help and turn patient onto her side, preferably left lateral position.

2.2. Clear airway and give oxygen

2.3. Set up IV line with Ringer's Lactate. Limit fluids to 80 ml/hour.

2.4. Dilute 4g $MgSO_4$ (8ml 50% solution) with 12ml normal saline. Give slowly intravenously over 4minutes. Institute a continuous maintenance infusion of 1g per hour. (Refer to $MgSO_4$ Protocol)

2.5. A further 2g $MgSO_4$ (20% Solution) should be given intravenously when convulsions occur or persist despite the loading dose of magnesium sulphate.

2.6. Insert Foley's catheter and measure output hourly.

2.7. Measure blood pressure every 15 minutes, until stabilised. Control blood pressure using rapidly acting antihypertensives (Refer to Section E). Keep diastolic blood pressure between 90 and 100 mmHg.

2.8. Assess fetal condition once the mother is stable. Obtain baseline CTG [if sure gestation ≥ 27w0d or if unsure gestation an EFW of ≥ 800g]

2.9. Arrange for delivery within 24 hours but give steroids a.s.a.p. if <34w and do preeclampsia workup as set out above.

2.10. Labour ward consultant must be informed of all eclamptic patients.

2.11. If biochemistry results are abnormal then the patient must be managed in conjunction with the L3 Obs/OCCU registrar.

3. Management of pre-eclampsia during labour

3.1. All pre-eclampsia patients must have restriction of intravenous fluids to 80ml of Ringer's Lactate solution hourly

3.2. Do Hb, Plts and creatinine urgently [add AST and LDH if low platelet count ($<100x10^9$/L)] if patient's condition change/deteriorates.

3.3. Give Nifedipine 10 mg orally, if the diastolic blood pressure rises to ≥110 mmHg or systolic blood pressure to ≥ 160. (See Section E)

3.4. Monitor urinary excretion hourly (catheterise patient).

3.5. Give a 200 ml intravenous fluid bolus if urinary excretion is less than <30ml/hour and do a full systemic evaluation of the patient. This can be repeated once of if there is no response in the next hour. If still no response after a second bolus then refer to L3 Obs/OCCU registrar for renal risk/oliguria in pre-eclampsia.

3.6. Keep on continous CTG until delivery (if viable)

3.7. Ensure quick delivery.

3.8. Give magnesium sulphate (see protocol) if signs of threatening eclampsia develop, or if patient needs to be transferred to another unit

3.9. Always evaluate and motivate these patients for epidural analgesia provided the platelet count is above 75 $x10^9$/L

3.10. **All pre-eclamptic patients in labour must be evaluated by a doctor at least every two hours.**

3.11. Strict nursing instructions on prescription chart-

- Hourly observation (BP,P,RR)
- Strict in and output monitoring
- Call Dr if SBP > 160 or < 90 DBP >110 or <60
  P > 140 or < 60 RR > 24 or < 10
  U-output < 30ml/hour

3.12. Depending on the severity of the disease ensure that post delivery the patient will have a bed in OCCU, Acute Post-Natal Room ('room 7') or Post-Natal.

E. MANAGEMENT: ANTENATAL: ACUTE SEVERE HYPERTENSION

Defined as diastolic BP ≥ 110mmHg [or systolic BP ≥ 160mmHg]

1. Initial Management: High Risk Clinic / C2A Admission patient:

1.1. Give 10mg Nifedipine orally immediately

1.2. Admit to emergency centre/ Labour ward.

1.3. Gain IV access and load with 200ml of Ringer's lactate IV over 20 min and start BP maintenance treatment with Adalat XL 30mg orally daily.

1.4. Initially aim for a diastolic BP < 110mmHg and systolic BP < 160mmHg

1.5. Consider magnesium sulphate (see protocol) if suggestive of pre-eclampsia.

1.6. Do Hb, platelet count, creatinine and liver functions (AST)

1.7. Once the mother is stable assess fetal condition and gestational age. Obtain baseline CTG [if sure gestation ≥ 27w0d or if unsure gestation an EFW of ≥ 800g]

1.8. Start antenatal corticosteroids administration a.s.a.p. [If Sure gestation 26w0d - 33w6d or if Unsure gestation EFW 800g–1850g]

2. Initial Management: Antenatal ward (F2) patient:

2.1. Give 10mg Nifedipine orally immediately, doctor on duty should be notified.

2.2. If still ASHT after review in 30 min then transfer to emergency centre/ Labour ward.

2.3. Gain IV access and follow point 3 below.

2.4. Aim for a diastolic BP < 110mmHg and systolic BP < 160mmHg

2.5. Consider magnesium sulphate (see protocol) if suggestive of pre-eclampsia.

2.6. Do Hb, platelet count, creatinine and liver functions (AST)

3. Persistent ASHT (Acute sever hypertension)

3.1. If still ASHT after review in 30min give Adalat 10mg orally again

3.2. If still ASHT after review in 30min give 20mg Labetolol IV.

3.3. If still ASHT after review in 10min give 40mg Labetolol IV again and refer patient to L3 Obs/OCCU registrar for –

- Evaluation admission to OCCU
- A-line (depending of availability of staff and equipment)
- IV Antihypertensives as per OCCU guidelines

4. Antihypertensive Maintenance Therapy

4.1. Start 30mg Adalat XL orally daily (Refer to point 1.3 above) and review regimen every 24-hours thereafter

4.2. If still uncontrolled (diastolic blood pressure > 100mmHg or systolic blood pressure > 150mmHg) after 24-hours change Adalat XL to 30mg twice daily.

4.3. If still uncontrolled (diastolic blood pressure > 100mmHg or systolic blood pressure > 150mmHg) after 24-hours on Adalat XL 30mg BD then review the patient with your consultant and consider adding α-methyl dopa 750mg 8 hourly orally.

4.4. If still uncontrolled (diastolic blood pressure > 100mmHg or systolic blood pressure > 150mmHg) after 24hours refer to Special Care/Maternal medicine for guidance of further management since delivery may need to be considered.*

** If suggestive of chronic long-standing hypertension then 12.5mg hydrochlorothiazide oral daily can be added.*

F. MANAGEMENT: INTRA-PARTUM: ISOLATED HYPERTENSION

1. Isolated finding of diastolic blood pressure of ≥ 90 mmHg during labour

1.1. Give adequate pain relief

1.2. Repeat BP in between contractions.

1.3. Write up Nifedipine 10 mg orally, for every time the diastolic blood pressure rises to ≥110 mmHg or higher (maximum 3 doses, doctor must be informed)

1.4. **If significant proteinuria is present, or there are signs of threatening eclampsia, manage further as for pre-eclampsia**

G. MANAGEMENT: POST PARTUM HYPERTENSION

1. General

1.1. Women who develop threatening signs or eclampsia for the first time after delivery need referral to specialist (level 2) care after stabilisation.

1.2. Patients with hypertension during pregnancy need to stay in hospital after delivery until the blood pressure is well controlled (< 150/100 mmHg).

2. Specific indications for treatment

2.1. **Asymptomatic patient with isolated high blood pressure in labour only**

- No hypertension in the antenatal period and no significant proteinuria.
- Observe post-partum until the blood pressure settles (usually 1-3 days).
- If repeated raised diastolic blood pressure to ≥110 mmHg OR the systolic blood pressure rises to >160 mmHg (treated with 10mg doses of nifedipine), start on anti-maintenance hypertensive medication.

- If the systolic blood pressure is 140-159mmHg and the diastolic blood pressure is 90-100 mmHg, treatment is not necessary. Observe patient for 24-48 hours and follow up at a district health service postnatal clinic within 3 days.
- The patient should return for care if she experiences persistent dizziness or headaches.

2.2. **Patients with gestational hypertension.**
(Treated with/without methyl dopa during pregnancy)

- Preferably stop **methyl dopa** after delivery (as it can exacerbate post-partum depression) and switch to other anti-hypertensive medication (i.e. enalapril if normal renal function).
- Confirm that the blood pressure is stable for 24-hours before discharge.
- Follow up at a district health service post partum clinic within 3 days and again at 6 weeks post partum, to evaluate need for continuation of medication.
- If the client only needed one drug to control blood pressure, provide a prescription for 4 weeks with discharge, so that the client is without medication for two weeks when followed up at the 6 weeks visit. A good assessment can then be made as to whether she will need further workup for hypertension and chronic medication.
- If she was discharged on more than one drug to control the blood pressure, rather do a step-wise withdrawal of one drug at a time with more regular follow up, preferably at the high-risk clinic.
- The patient should return for care if she experiences persistent dizziness or headaches.

2.3. **Patients with chronic hypertension**

- Can be changed to the drugs they used before pregnancy (if it is safe to use during lactation) and discharged as soon as they are stable.
- They can be followed up after 3 days and again after 6 weeks at the district health service postnatal clinic.

2.4. **Patients with severe pre-eclampsia during pregnancy**

- Should be managed with anti-hypertensive medication after delivery and kept in hospital until blood pressure is controlled for 48-hours and all the biochemistry / systems are normal.
- Follow up 3 days after discharge at nearest clinic and again at 6 weeks post partum at a high-risk post natal (specialist) clinic, to evaluate need for continuation of medication.
- If good control with one drug only, provide a prescription for 4 weeks with discharge, so that the client is without medication for two weeks when followed up at the 6 weeks visit. A good assessment can then be made as to whether she will need further workup for hypertension and chronic medication.

- If she was discharged on more than one drug to control the blood pressure, rather do a step-wise withdrawal of one drug at a time with more regular follow up at the high-risk clinic.
- The patient should return for care immediately if she experiences persistent dizziness or headaches.

3. Choice of drugs

3.1. Although there is no clear indication from published literature as to which drug to start with, a general approach would be to use the cheapest effective drug available at all levels of care and to adhere to the provincial guideline on hypertension outside of pregnancy, as the clients will be managed after the puerperium according to that guideline.

3.2. A first choice would thus be an ACE inhibitor (enalapril) at a dose of 5mg in the morning, can be increased to 20mg daily. *(If the patient's renal function is within normal limits.)*

3.3. When a second drug is needed, add a calcium channel blocker (amlodipine) 5mg daily and increase to 10mg daily when needed.

3.4. When a third drug is needed, use a beta blocker (atenolol) 50mg daily. Can be increased to 100mg daily if needed, although 100mg is not much more effective than 50mg.

3.5. Hydrochlorothiazide can be started as a first line drug in cases of chronic hypertension (12.5mg daily, increase to 25mg daily when needed).

3.6. In refractory cases, Adalat XL can be used (specialist prescription only) starting at 30mg daily and increasing to a maximum of 90mg daily. Telephonic referral can be done to ICCU for these patients.

3.7. As with the prescription of any drug, check for contra-indications and possible drug interactions before prescription.

AVAILABLE DRUGS ON THE CODING LIST 2010

- ***Adalat XL*** (30 mg): Specialist prescription only; for hypertension during pregnancy only.
- ***Amlodipine*** (*Norvasc*): Is regarded as unsafe to use in pregnancy as there is not yet enough data on its safety; it is used in the postpartum period but the package insert still regards lactation as a contra-indication. Available at all levels of care (5mg dose).
- ***Atenolol*** (*Tenormin*) 50 mg: General availability at all levels of care
- ***Enalapril*** (*Renitec*) 2.5mg, 5mg, 10 mg and 20mg: General availability at all levels of care [feto-toxic; not to be used during pregnancy but can be used during lactation]
- ***Hydrochlorothiazide*** (*Ridaq*) 25mg: General availability at all levels of care [suppresses breast milk production at high doses]
- ***Labetalol*** (IV) 100mg: Specialist indications only.
- ***Methyl dopa*** (*Aldomet*): Specialist initiated except during pregnancy, where it is available at all levels of care according to the provincial guideline. There is a risk for depression when used in the post partum period.
- ***Nifedipine*** (5mg, 10mg): Available at all levels of care for the management of hypertension during pregnancy only.

H. MANAGEMENT: SUBSEQUENT PREGNANCIES

1. Ensure that the discharge note is in the possession of the patient with adequate advice for the next pregnancy. Advise the patient on the importance of a pre-conceptual visit and advice.

2. Patients with uncomplicated hypertensive disorders in pregnancy need to be followed at the DHS postnatal clinic.

3. Patients with early onset, severe pre-eclampsia can benefit from **Aspirin** 75 mg daily in the next pregnancy- start as early as possible (from 12w onwards) and continue to 36 weeks.

4. Identify selected patients at discharge [After telephonic consultation with Special Care/Maternal Medicine] who should book at Special Care clinic for preconceptional counselling and screening when the next pregnancy is planned again.

5. If pregnant, book at nearest local clinic and ask for referral to a high-risk antenatal service if history of severe, complicated or early preeclampsia. (Bring along discharge note if possible.)

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COMMITTEE RESPONSIBLE	GS Gebhardt, E Langenegger, L Geerts, DR Hall, JL van der Merwe
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DATE EFFECTIVE	1 August 2010
REVIEW DATE	31 July 2013
EVIDENCE	Evidence basis for the above decision is available on request

Signed: GS Gebhardt

Head: general specialist services; Obstetrics and Gynaecology