SOMANZ

SOCIETY OF OBSTETRIC MEDICINE OF AUSTRALIA AND NEW ZEALAND

Top 10 Points for Clinicians from the SOMANZ Hypertension in Pregnancy Guidelines 2023

1	Women with hypertension in pregnancy (Systolic BP ≥140 and/or diastolic BP ≥90mmHg) should be assessed for a diagnosis of a hypertensive disorder of pregnancy (HDP) – preeclampsia, gestational hypertension, chronic hypertension, super-imposed preeclampsia, white coat hypertension or masked hypertension[1]. (Part 1)*
2	All women should be assessed in the first trimester for their risk of developing preeclampsia, at a minimum, with clinical parameters (history and blood pressure assessment). Where available, combined first trimester screening, including uterine artery Doppler together with biomarkers, may enhance the risk assessment[2]. (Part 2)*
3	Initiate preventative strategies if a woman is identified to be at high-risk of preeclampsia. Preventative measures proven to be beneficial include: commencing aspirin 150mg daily (taken at night/bedtime) prior to 16 weeks of gestation, supplemental calcium (where assessed dietary calcium intake is <1g/day) and undertaking aerobic exercise as recommended as part of routine pregnancy well-being[3]. (Part 3)*
4	Proteinuria in pregnancy should ideally be assessed with a spot (random) urinary assessment rather than dipstick assessment alone. If dipstick assessment is the initial means of assessment, proteinuria should be confirmed with laboratory quantification. A urinary protein:creatinine ratio with a cut off of ≥30mg/mmol or where this is unavailable, a spot albumin:creatinine ratio with a cut off of ≥8mg/mmol can be used to diagnose proteinuria in pregnancy[4]. (Part 4)*
5	An angiogenic biomarker (sFlt-1/PlGF ratio) result of ≤38, used after 20 weeks gestation in conjunction with clinical assessment, can be used to rule out preeclampsia within 1-4 weeks of testing in symptomatic women where there is a clinical suspicion of preeclampsia. The sFlt-1/PlGF ratio should not replace clinical assessment. The use of the sFlt-1/PlGF ratio for diagnosis of preeclampsia, predictingdelivery or fetal outcomes and routine testing in asymptomatic women is not recommended until more data is available[5]. (Part 4)*
6	Women with gestational hypertension or chronic hypertension should have blood pressure controlled to a target of ≤135/85mmHg. This has been shown to be maternally beneficial without adverse effects to the fetus[6]. (Part 5)*
7	Home blood pressure monitoring or ambulatory blood pressure assessment [when assessed with validated machines] can be used to diagnose white coat or masked hypertension. Home blood pressure monitoring can be safely utilised in women with chronic or gestational hypertension with appropriate counselling but should not replace the minimum frequency of antenatal review based on the clinical scenario[7]. (Part 5)*
8	Where clinically possible, women with preeclampsia should have delivery initiated at ≥37 weeks gestation. At less than 37 weeks, delivery should be planned based on the clinical scenario with consideration for corticosteroids and magnesium sulphate in women at risk of early preterm delivery[8]. (Part 6)*
9	Non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided in the immediate post-partum period. In the absence of an alternative analgesic agent, the use of NSAIDs should be limited to short-term inpatient usage[9].(Part 7)*
10	Women should be informed of the longer-term risks associated with HDP (e.g. hypertension, cardiovascular disease, stroke, kidney disease). Strategies to optimise their future cardiometabolic profile and prevent preeclampsia/gestational hypertension in subsequent pregnancies should start prior to discharge and be ongoing. Women with a HDP postpartum should have an assessment of abnormalities identified in pregnancy (eg proteinuria, hypertension). Persisting clinical and biochemical abnormalities should be further evaluated and managed as appropriate[10]. (Part 8)*

BP- Blood pressure, **HDP-** Hypertensive disorders of pregnancy, sFLT-1- soluble fms-like tyrosine kinase-1, PlGF- placental growth factor, NSAIDs- Nonsteroidal anti-inflammatory drugs

***Refers to the relevant part in the main guideline**

1. Masked hypertension has been added as a diagnostic HDP category given the better understanding of the adverse effects of this disorder on the outcomes of pregnancy.
2. By identifying preeclampsia risk early in pregnancy, women may be offered preventative therapies. Women may opt to undergo combined first trimester screening to maximise risk assessment.
3. The current heterogenity of aspirin dosing should reduce given the evidence supporting the use of 150mg/day. With the resources and evidence provided, more women are likely to have their dietary calcium intake assessed to identify their need for supplemental calcium.
4. Given the accuracy of spot urinary protein assessments and the issues related to accurately collecting a 24hr urine collection and dipstick, women will consistently have spot urine assessed for proteinuria.
5. Angiogenic markers may reduce the number of women admitted to hospital and potentially the length of admissions. It may also help identify women with disorders that mimic preeclampsia and thus facilitate early intervention and therapy e.g. women with renal disease.
6. Improved outcomes and more consistent treatment of BP with less variation in clinical practice will be evident given the clear BP target.
7. Home BP monitoring will reduce the number and the associated burden, of extra clinic visits for women with selected HDPs. Centers should identify how they can support women in testing their blood pressures at home.
8. Women should have clear indications and plans formulated for birth if diagnosed with preeclampsia.
9. It's important to identify that brief exposure to NSAIDs can be used if required- thus increasing post-operative therapeutic options for women with a HDP. But specifying the cessation of these medication on discharge may reduce the number of women presenting with severe hypertension in the post-natal period after discharge.
10. By ensuring follow up and future care, a reduction in future adverse pregnancy events and improved maternal long term health outcomes would be expected.