Uterine Artery Doppler Screening at 20-24 Weeks Gestation	
Type: Guideline	HDSS Certification Standard:
Issued by: Maternity PPG Group	**Version:** 2.1
Applicable to: Hutt Valley DHB	**Contact person:** O&G SMO
Lead DHB: Hutt Valley DHB	**Level:**

Hutt Maternity Policies provide guidance for the midwives and medical staff working in Hutt Maternity Services. Please discuss policies relevant to your care with your Lead Maternity Carer.

Purpose:

The purpose of this guideline is to establish a local approach to management of uterine artery Doppler screening at 20-24 weeks gestation, that is evidence based and consistent, to inform good decision making.

Scope:

For the purposes of this document, staff will refer to:

All staff within Hutt Valley DHB. This includes staff not working in direct contact with patients/consumers. Staff are taken to include anyone engaged in working to the Hutt Valley DHB. This may include but is not limited to:

- Employees irrespective of their length of service
- Agency workers
- Self-employed workers
- Volunteers
- Consultants
- Third party service providers, and any other individual or suppliers working in Hutt Maternity, including Lead Maternity Carers, Radiologists, Sonographers and personnel affiliated with third parties, contractors, temporary workers and volunteers
- Students

Definitions:

- **FGR** Fetal growth restriction
- **hCG** Human chorionic gonadotrophin
- **MoM** Multiples of median
- **MSS1** Maternal serum screen (first trimester)
- **PAPP-A** Pregnancy-associated plasma protein A

Indications:

As per the NZMFM 2014 New Zealand Obstetric Doppler Guideline, offer uterine artery Doppler screening for pregnant people at high-risk of developing early pre-eclampsia (prior to 32 weeks) or early small for gestational age (SGA) baby

- Screen at 20 or 24 weeks
- If abnormal at 20 weeks, screen again at 24 weeks

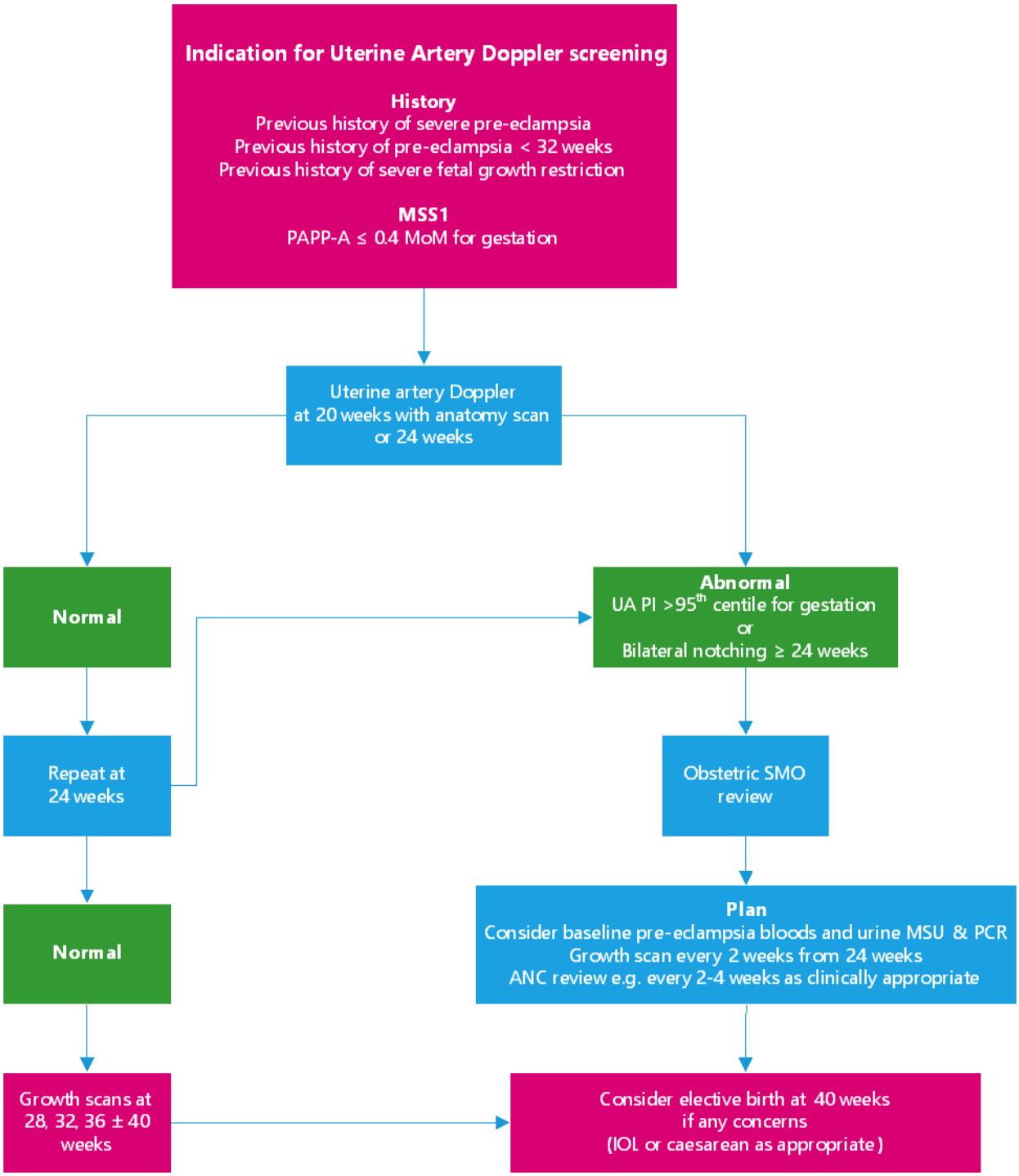
Indications include:

- Previous severe pre-eclampsia and/or pre-eclampsia before 32 weeks
- Previous severe or early onset fetal growth restriction
- Anti-phospholipid syndrome (APLS)
- Pre-existing (essential or chronic) hypertension
- Known renal disease
- Low PAPP-A on MSS1 < 0.4 MoM

Measurement

- Use pulsatility index (PI)
- PI is documented as the mean PI value between the two (left and right) uterine artery Doppler measurements
- Abnormal is defined as either
    - > 95th centile gestation
    - Bilateral notching ≥ 24 weeks

Indication for Uterine Artery Doppler Screening Flowchart



References:

- Ministry of Health. 2019. *New Zealand Obstetric Ultrasound Guidelines*. Wellington: Ministry of Health. doi
- New Zealand Maternal Fetal Medicine Network. 2014. New Zealand Obstetric Doppler Guideline.

- Canterbury DHB Women's Health Service. 2019. Antenatal obstetric ultrasound: indications for Doppler assessment. WCH/GLM0059 (237272)
- Capital and Coast DHB: MFM guidelines on uterine artery Doppler.

Keywords for searching:

1. Uterine Artery
2. Ultrasound
3. Doppler
4. MATY088

Informed Consent:

The right of a consumer to make an informed choice and give informed consent, including the right to refuse medical treatment, is enshrined in law and in the Code of Health and Disability Consumers' Rights in New Zealand. This means that a woman can choose to decline treatment, referral to another practitioner, or transfer of clinical responsibility. If this occurs follow the process map on page 18 of the Referral Guidelines (Ministry of Health, 2012).

Tangata Whenua Statement:

The Women's Health Service recognises the rights and responsibilities of Māori as tangata whenua and Treaty Partners. This allows and acknowledges the importance of cultural diversity in all aspects of our care and practice in Aotearoa New Zealand.

As stated in Te Pae Amorangi (Hutt Valley DHB Māori Health Strategy) 2018-2027, Hutt DHB as a Crown agency is committed to our role in maintaining active relationships with iwi, under Te Tiriti o Waitangi. This strategy recognises the established principles of Partnership, Participation and Protection and recognises steps towards the reviewed interpretation of Te Tiriti principles to date (from the Wai 2575 claim into health). These are tino rangatiratanga, equity, active protection, partnership and options.

Attention in particular is drawn to:

- **Article one – Kāwanatanga**: actively engaging and working alongside with local iwi through the Hutt Valley Māori Health Unit
- **Article two – Tino Rangatiratanga**: Self-autonomy, self-determination; the responsibility to enable Māori to exercise their authority over their own health, determinants and definition of health
- **Article three – Ōritetanga**: equal health outcomes of peoples; ensuring that policy, guidelines or programmes do not further perpetuate any inequity
- **Article four (the 'oral clause') – Wairuatanga**: spirituality; thriving as Māori and the importance of health providers understanding health in te ao Māori (the Māori world), acknowledging the interconnectedness and inter-relationship of all living and non-living things.