



# Learn simply

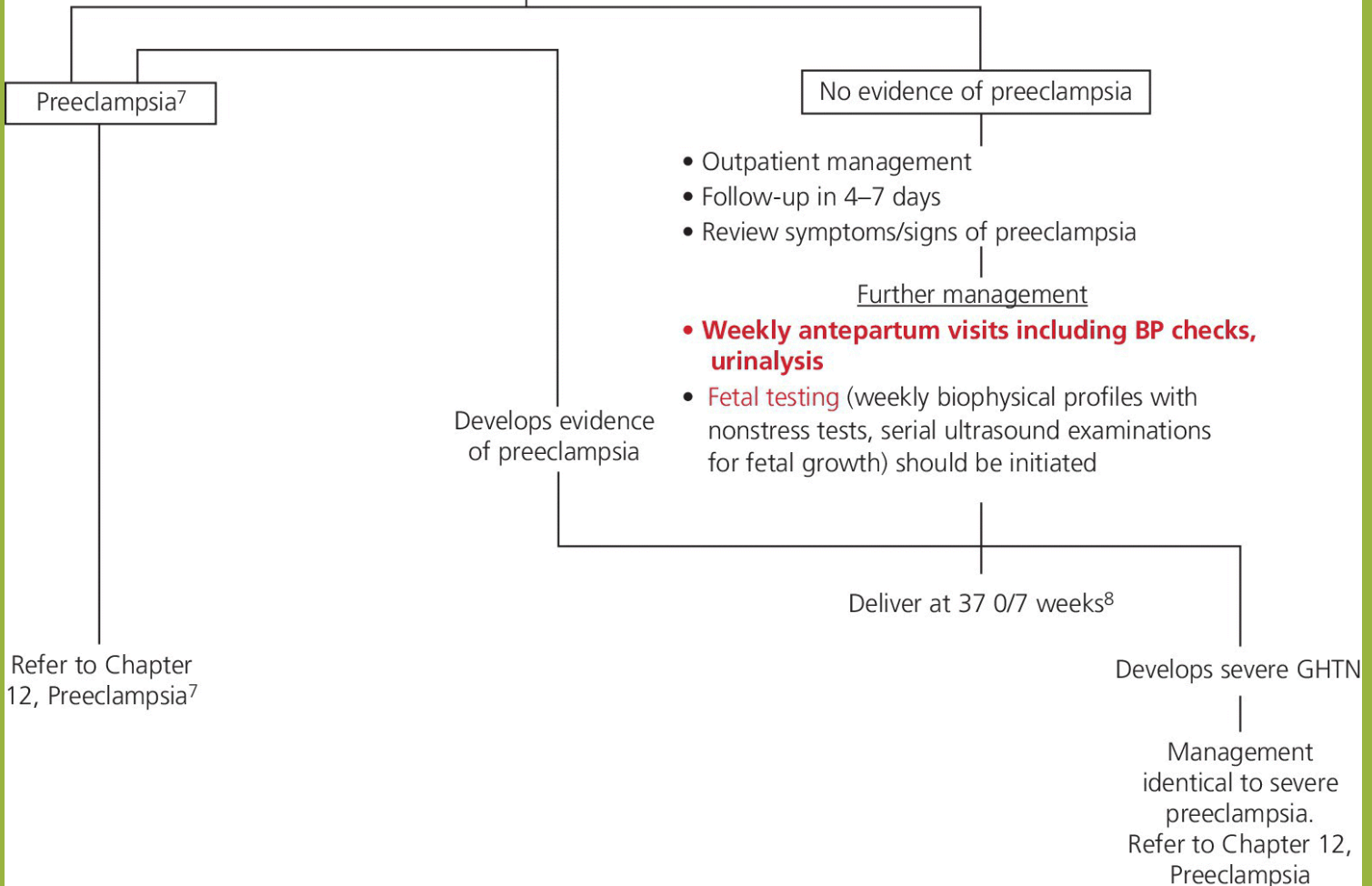
## Gestational Hypertension

Passion Profession same

### History and/or examination suggestive of gestational hypertension<sup>2</sup>

Initial evaluation

- Confirm the diagnosis<sup>3</sup>
- **EXCLUDE PREECLAMPSIA<sup>4</sup>**
- Document fetal well-being<sup>5</sup>
- Do not initiate antihypertensive therapy<sup>6</sup>



1. Characterized by new-onset BP elevation after 20 weeks of gestation, often near term, in the absence of accompanying proteinuria. Hypertension is defined as systolic BP  $>140$  mmHg and/or diastolic BP  $>90$  mmHg on two occasions at least 4 hours (but not more than 7 days) apart.
2. Patients with gestational hypertension should be asymptomatic. The diagnosis should be suspected in a patient who presents with a new-onset sustained elevation in BP without proteinuria in the second or third trimester.
3. Gestational hypertension refers to a sustained elevation in systolic BP  $>140$  mmHg and/or diastolic BP  $>90$  mmHg without evidence of preeclampsia in a previously normotensive woman. It is a diagnosis which should only be made after 20 weeks of gestation, and likely represents an exaggerated physiologic response of the maternal cardiovascular system to pregnancy.



1. Gestational hypertension may progress to preeclampsia, but preeclampsia can be excluded initially by the absence of maternal symptoms of preeclampsia and laboratory abnormalities. The following tests should be sent: urinalysis, 24-hour urine collection for protein quantitation and creatinine clearance, CBC with platelets, liver and renal function tests, and uric acid. It may be necessary to consider hospitalization for approximately 24 hours to exclude preeclampsia. If the systolic BP is  $\geq 160$  mmHg and/or diastolic BP is  $\geq 110$  mmHg on two occasions at least 4 hours apart, the diagnosis is severe gestational hypertension. Mild gestational hypertension is rarely associated with adverse maternal or fetal outcome. However, severe gestational hypertension has been associated with outcomes similar to women with preeclampsia. Of note, 14-20% of women with eclampsia (and hence severe preeclampsia) do not have proteinuria prior to their seizure.
2. Such testing should include a nonstress test (looking for evidence of uteroplacental insufficiency), a biophysical profile (BPP) or amniotic fluid estimation, ultrasound for estimated fetal weight (EFW) or a combination of these modalities. Umbilical artery Doppler velocimetry is only useful in the setting of fetal growth restriction.
3. Treatment of mild hypertension has not been shown to improve pregnancy outcome. Antihypertensive therapy is used to prevent severe gestational hypertension and maternal hemorrhagic stroke. There are only three indications for antihypertensive therapy in the setting of preeclampsia:
  - (i) underlying chronic hypertension;
  - (ii) to achieve BP control to prevent cerebrovascular accident while effecting delivery; and/or
  - (iii) expectant management of severe preeclampsia by BP criteria alone (Sibai protocol).



1. In women with mild gestational hypertension, the progression to severe gestational hypertension or preeclampsia often develops within 1-3 weeks after diagnosis. Elevated concentrations of uric acid ( $>5.2$  mg/dL) might be predictive of progression to preeclampsia and a risk factor for adverse maternal-fetal outcome.
2. Delivery is the only effective treatment for gestational hypertension and preeclampsia. It is recommended in women with mild gestational hypertension and preeclampsia without severe features at or beyond 37-0/7 weeks or at or beyond 34-0/7 weeks of gestation if there is evidence of fetal growth restriction  $<5$ th percentile.
3. If severe gestational hypertension develops, management is similar to women with preeclampsia with severe features and delivery is recommended at 34-0/7 weeks of gestation. There is no proven benefit to routine delivery by cesarean; however, the probability of vaginal delivery decreases with decreasing gestational age.
4. With labor induction, the likelihood of cesarean delivery is 93-97% at  $<28$  weeks, 53-65% at 28-32 weeks, and 31-38% at 32-34 weeks.

