

Chapter 5



HYPERTENSIVE DISORDERS IN PREGNANCY

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Cardiovascular diseases are the leading cause of pregnancy-related mortality in the USA, and its frequency increased from 7.2 to 17.2 per 100,000 from 1987 to 2015. ⁽¹⁾ Hypertensive disorders are the most common among these diseases and occur in 5-10% of all pregnancies. ⁽²⁾ It is one of the most important causes of maternal and fetal mortality. Women with hypertensive disorders during pregnancy have an increased risk of future cardiovascular events. For this reason, they should be followed up in this respect not only during pregnancy but also afterwards.

Definition and Classification of Hypertension in Pregnancy

Office blood pressure ≥ 140 mmHg systolic and/or diastolic ≥ 90 mmHg during pregnancy is defined as hypertension. 140-159/90-109 mmHg values are mild hypertension and $\geq 160/110$ mmHg is defined as severe hypertension. ⁽³⁾ Hypertension in pregnancy is not a single condition, it includes multiple different clinical conditions.

- Chronic hypertension.
- Gestational hypertension
- Eclampsia and Preeclampsia
- Preeclampsia superimposed to chronic hypertension
- Antenatally unclassifiable hypertension

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Nitroprusside	C	Yes	Unknown	Insufficient human data Animal data: risk of fetal cyanide poisoning and fetolethality
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Abbreviations:

ACE: Angiotensin converting enzyme; ARB: Angiotensin receptor blocker; IUGR: Intrauterine growth retardation

*Adopted from 2018 ESC Guidelines for the management of cardiovascular diseases during pregnancy and drugs.com^(3,33)

Pregnancy categories:

Category A: Adequate and well-controlled studies have failed to demonstrate a risk to the fetus during the first trimester of pregnancy (and no evidence of risk in subsequent trimesters).

Category B: Animal reproduction studies have failed to show a risk to the fetus and there are no adequate and well-controlled studies in pregnant women.

Category C: Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well-controlled studies in humans, but the potential benefits may warrant use of the drug in pregnant women despite potential risks.

Category D: There is positive evidence of human fetal risk based on adverse reaction data from research or marketing experience or from studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.

Category X: Studies in animals or humans have shown fetal abnormalities and/or there is positive evidence of human fetal risk based on adverse reaction data from research or marketing experience, and the risks associated with the use of the drug in pregnant women clearly outweigh the potential benefits.

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