

Cardiovascular Disease (CVD) in Pregnancy & Postpartum Algorithm

Ask your patient:

“Are you pregnant or have you been pregnant in the last 12 months?”

If yes, symptoms may be related to pregnancy and can occur up to 12 months postpartum.

CVD can happen in this patient group regardless of age. Don't ignore red flags!

Red Flags for Cardiovascular Disease

- Shortness of breath at rest
- Chest pain at rest, with minimal exertion or ripping/tearing in quality
- Palpitations associated with near syncope
- Severe orthopnea
- Resting HR ≥ 120 bpm
- Resting systolic BP ≥ 160 or < 90
- Resting RR ≥ 25
- Oxygen saturation $\leq 94\%$, with or without personal history of CVD
- Loud systolic murmur, diastolic murmur, S3, or S4
- Wheezing, crackles on lung exam
- Distended neck veins

Other Signs and Symptoms

may be vague but can include:

Chief Complaints

- Dyspnea
- Edema
- Cough
- Change in exercise tolerance
- Paroxysmal nocturnal dyspnea (PND)

Physical exam findings

- Desaturation with ambulation
- Murmur
- Peripheral edema

Consider in your differential diagnosis:

Myocardial infarction (including spontaneous coronary artery dissection), peripartum cardiomyopathy, congestive heart failure, arrhythmia, aortic dissection

Key Work-up

EKG, BNP, chest X-ray, and troponin

If testing is abnormal, CVD is a possible diagnosis:

- Obtain echocardiogram, consider transferring patient to obtain if not available at your facility
- Consult with cardiology and obstetrics or maternal-fetal medicine, if available
- Consider treatment and admission or transfer as clinically indicated

Treatment

Most medications for the treatment of cardiovascular emergencies do not have robust data surrounding their use in pregnancy and breastfeeding. These medications should **not** be withheld from a pregnant or breastfeeding patient in a life-threatening emergency if they are otherwise indicated. However, long-term use of certain medications should be avoided or may be contraindicated in pregnant or lactating patients; consult a pharmaceutical reference, obstetrics, or cardiology for further considerations.