

Taking a Cardiopulmonary History

Including some key questions in your HOPI and ROS while interviewing patients can help distinguish between cardiac, pulmonary, or other (GI or musculoskeletal, others) causes of symptoms. These guiding questions can be abbreviated for use in a preventive examination for screening, or expanded upon when the patient presents with cardiopulmonary symptoms or risk factors.

Common Cardiac Symptoms

- Chest pain, esp. with exertion
- Palpitations
- Shortness of breath (dyspnea, orthopnea, or paroxysmal nocturnal dyspnea)
- Edema

Common Pulmonary Symptoms

- Chest pain, esp. with deep breaths (pleuritic) or with infectious symptoms
- Cough
- Wheezing
- Shortness of breath (often at rest)
- Hemoptysis (bloody sputum)

Key Overall Points:

- Compare to patient baseline—and find out if they have changed their baseline activity level to accommodate the symptoms
- Always keep in mind a list of cardiac, pulmonary, and extra thoracic (msk, hematologic-anemia, and other) etiologies of symptoms when taking a patient history

1.) *Chest pain-*

May be of several types and from many causes, including many cardiac or pulmonary pathologies.

- a. May commonly signal coronary artery disease (CAD) .
- b. Cardiac pain may be described as pain or pressure or fullness or discomfort. Sometimes less typical descriptors are used (grinding, pricking). Pulmonary pain may be worse with deep breaths or associated with cough.
- c. May localize to the chest or epigastric area and radiate to shoulder, back, neck, or arm, rarely to jaw/mouth in angina.

- d. Start with a broad question (“Do you have any chest discomfort?”) when taking history, and then narrow/focus this and acquire added information. (“Is the pain at rest or with exertion/does it radiate?/Where?/Is it accompanied by nausea, dizziness or other symptoms?”). This will help discern the differential diagnosis of the pain .
- e. Cardiac pain may associate with syncope or dizziness.

2.) Palpitations-

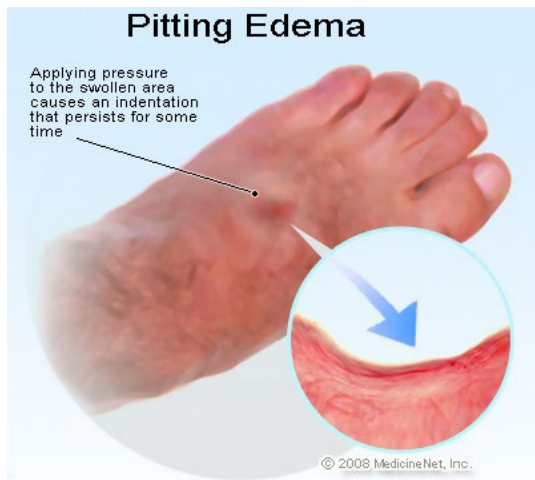
- a. Irregularity in heartbeat that may be described as skipping, racing, pounding, etc.
- b. May question patient about cardiac consciousness (awareness) as sensitivity to perception of arrhythmia/palpitations is very variable. Ask if heart seems to speed up, slow down, or skip beats (start-and-stop feeling).
- c. Some patients can be taught to count their pulse to verify fast (over 100) or slow (under 60) heart rate at rest to help quantify this.
- d. If persistent or frequent, may identify with EKG or with cardiac monitor worn as outpatient.
- e. Many times palpitations represent a benign finding (and many serious arrhythmias such as ventricular tachycardia do not present frequently with palpitations.)

3.) Shortness of breath-

- a. May be of several types and from many causes, including many cardiac or pulmonary pathologies.
- b. Dyspnea-shortness of breath (SOB) inappropriate to level of exertion. May have many causes, not all cardiac.
- c. Paroxysmal nocturnal dyspnea (PND) is shortness of breath that awakens a patient from sleep. It is usually cardiac in etiology.
- d. Orthopnea is SOB when lying down that is relieved by sitting up.
- e. Orthopnea is classically is quantitated by number of pillows needed to prop up px, allowing sleep without SOB, ie, “3-pillow orthopnea” . Or, patient may sleep in recliner.
- f. Heart failure or chronic obstructive pulmonary disease (COPD) may cause orthopnea.

4.) Edema-

- a. Swelling in the interstitial spaces, causing pitting (if 10% over usual fluid balance) or tight clothes
- b. May be cardiac (esp. if dependent edema) or due to inadequate liver or kidney function.



-Drawing from medicinenet.com

Screening for Associated Risk Factors for CVD (CAD and stroke) in Asymptomatic Patients:

Screen for CVD risks and Counsel Needed Lifestyle Changes-(begin at age 20 yrs)

- Family history of stroke or CAD-before age 55 in men or 65 in women in first degree relatives increases risk
- Smoking-any is too much. Counsel to STOP.
- Poor Diet-counsel 2.4 grams/day of sodium and low saturated fats with lots of vegetables/fruits
- Alcohol use-reduce to 1 ounce/day or less for men, half that for women
- Physical inactivity-counsel 30 minutes/day most days of exercise
- HTN-140/90 bp or antihypertensive medicine use increases risk; reduce bp. 120/80 is prehypertension. Address this and counsel risk reduction for HTN.
- BMI too high—counsel reduction to 18.5-24.9 kg/m²
- High Cholesterol-HDL under 40 in men or 50 in women or trig over 150 increases risk; reduce saturated fats. Total fasting cholesterol should be under 240 (high) and preferably under 200 (normal). Recommended LDL levels vary by age and with other medical conditions.
- High glucose/metabolic syndrome-abdominal obesity or fasting glucose over 110 mg/dL increase risk-counsel carbohydrate and weight reduction