Interviewing and Health History

Core Curriculum for CV Clinicians

Heart House 2016

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No disclosures
No off-label discussion

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Learning Objectives

- Describe a comprehensive patient interview
- Identify chief complaints that may be clues to underlying likelihood of cardiac disease
- Identify tools and strategies for clinical efficiency during the interview portion of your clinical encounters

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“There's an old saying about those who forget history. I don't remember it, but it's good.”

Stephen Colbert


COTTON CANDY


COTTON CANDY

*"There is **no** diagnostic test as useful as a good cardiac history!"*

The cardiac history: environment

- Quiet, private location
- Door closed, TV off
- Relatives out of the room*
- Let your patient talk
- *Sit down and listen!*

** for at least a part of the history*

The cardiac history: elements

- Presenting concern(s)
- Major CV symptom review: our focus
- Past cardiac history
- Family history
- Medication review
- CV risk factors: more on this tomorrow!
- Psychological appraisal


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History and CV risk:

- Family Hx of premature CAD: RR doubles
- Smoking: RR triples
- Diabetes: RR quintuples (CAD equivalent)
- Gender: CV risk for women
  - less under age 40
  - gradually achieves parity by 70
  - greater over age 70
- Age: sliding scale (83% of infarcts > age 65)

JAMA 285:2486, 2001

Family history of premature CAD

- Definition: 1° relative with CAD < 55 (man); < 65 (woman)
- Risk greater if sibling than parent
- Risk greater if mother than father
- One 1° relative with premature MI increases risk by 33%
- Two 1° relatives: risk increased by 50%
- Family history: a modifiable risk factor?

Major cardiac symptoms

- Dyspnea
- Chest pain
- Syncope
- Palpitation
- Edema
- Cyanosis
- Cough / hemoptysis
- Claudication
- Fatigue

Your Patient
60 year old dyspneic woman
Which of the following is most accurate?

a) Differential diagnosis is straightforward

b) Chest heaviness specific for cardiac cause

c) Prior CHF history suggests cardiac source

d) Smoking history makes CHF more likely

Your Patient:
60 year old dyspneic woman

a) Differential diagnosis is straightforward

b) Chest heaviness specific for cardiac cause

c) Prior CHF history suggests cardiac source

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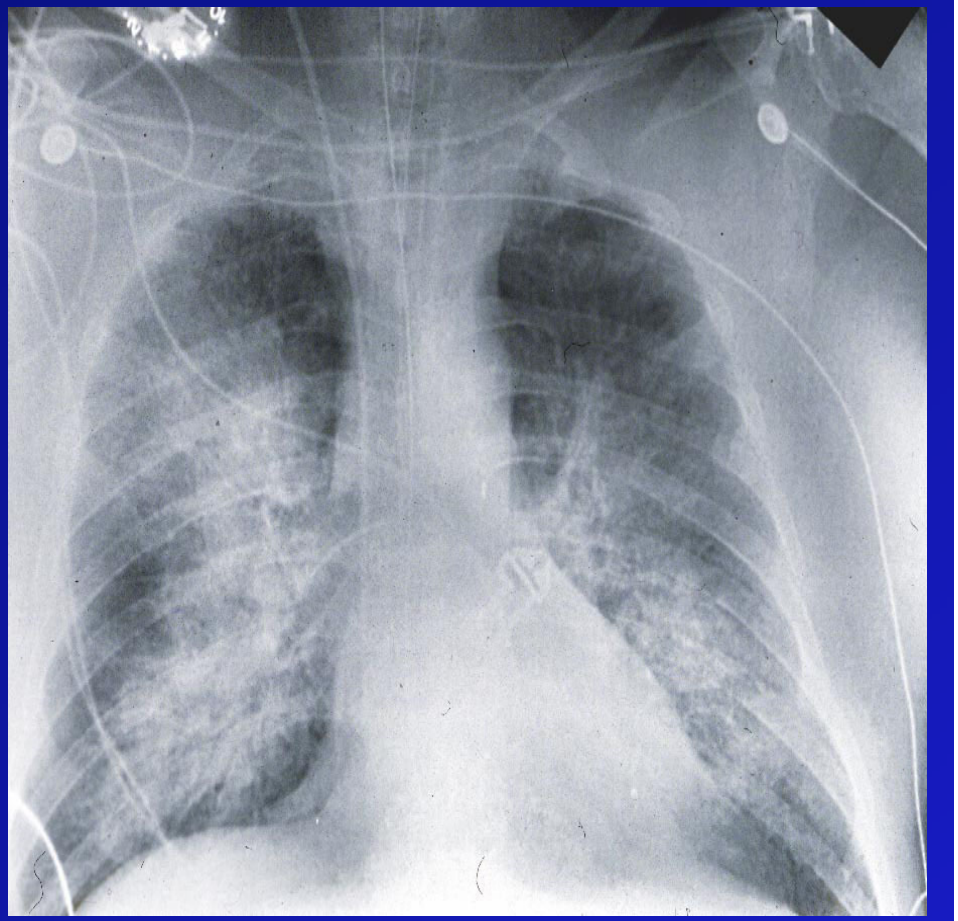
FUNCTIONAL CLASSES OF DYSPNEA: (NYHA Classification)

Class I	dyspnea on extreme exertion (7-8 METS)
Class II	dyspnea on moderate exertion (5-6 METS)
Class III	dyspnea on mild exertion(3-4 METS)
Class IV	dyspnea at rest (1-2 METS)

One MET = energy used sitting quietly

Cardiac causes of dyspnea

- congestive heart failure
- coronary artery disease
- myocardial infarction
- valvular dysfunction
- pericardial effusion / constriction
- tachy / bradyarrhythmias

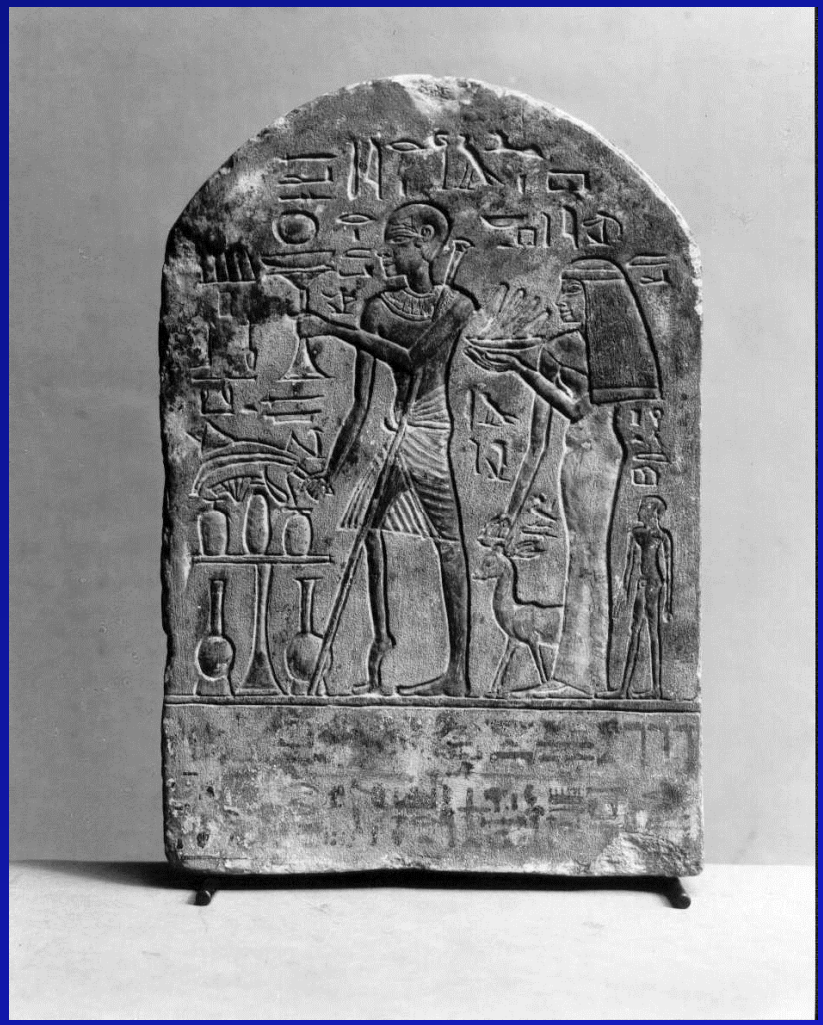


Pulmonary causes of dyspnea

- asthma / COPD
- pulmonary fibrosis
- pulmonary emboli
- pulmonary hypertension
- pneumonia
- lung cancer
- pneumothorax
- pleural effusion

Non-cardiac non-pulmonary causes of dyspnea

- chest cage abnormalities
- metabolic acidosis
- neuromuscular disease
- anemia
- anxiety / depression
- obesity / deconditioning
- vocal cord paralysis
- thyroid disease



Does this dyspneic patient have congestive heart failure?

Medical history

- Prior history CHF – LR 5.8
- Prior history MI – LR 3.1
- Prior history CAD – LR 1.8

Symptoms

- PND – LR 2.6
- Orthopnea – LR 2.2
- Edema – LR 2.1

Wang JAMA 294:1944, 2005

Does this dyspneic *COPD* patient have congestive heart failure?

Medical history

- Prior history atrial fib – LR 4.1
- Prior history CABG – LR 2.8
- Prior history MI – LR 2.2
- Prior history CAD – LR 2.0

Symptoms

- Orthopnea – LR 1.3

Wang JAMA 294:1944, 2005

Consult: GQ, a 50 y.o. smoker

- Frequent episodes of severe left precordial pain
- Described as sharp, needle-like
- Duration 10-30 seconds
- Not exertional, ‘not sure’ if NTG helps, but his boss gave him some…

Regarding GQ – which is correct?

a) the chest pain is typical angina pectoris

b) stenting the LAD will relieve his pain

c) stress test should be considered next

d) symptoms suggest coronary vasospasm

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Features suggestive of angina

- Site: central retrosternal, throat, left arm
- Quality of pain: dull, pressure
- Duration: minutes, not seconds or hours
- Radiation: to jaw, throat, upper back, arm
- Provoking factor: exercise, emotion, eating and cold weather
- Relieving factors: rest & TNG
- Associated symptoms: dyspnea, sweating, pallor, nausea

Another chest pain history

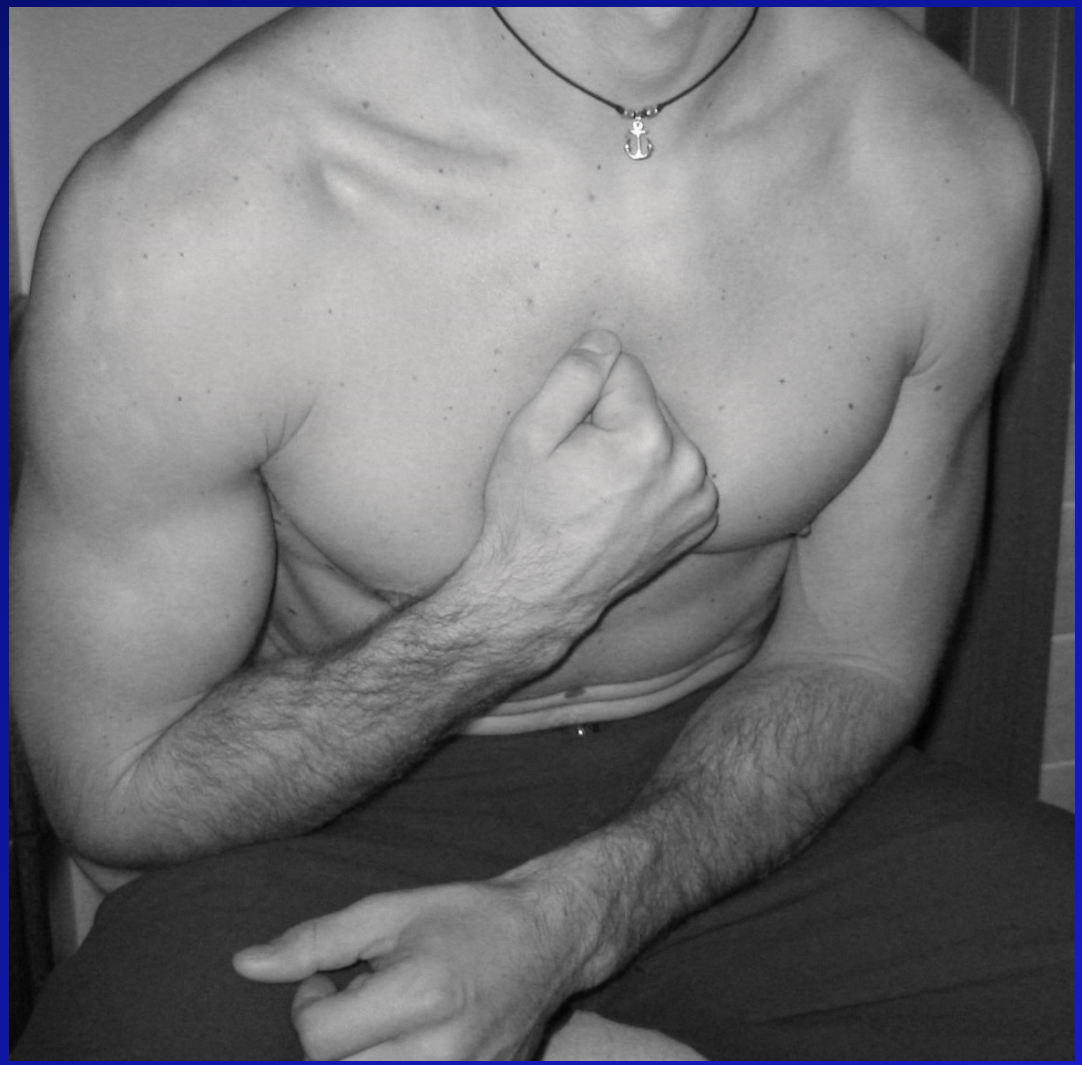
- 36 year old man with prior LAD stent
- admitted September 4th for unstable angina
- ER note:

  "chest pain worse with activity, better with nitroglycerin, similar to his prior distress"

- let's retake the history ourselves…

Cardiac symptom review

- Site:
- Quality of pain:
- Duration:
- Radiation:
- Provoking factor:
- Relieving factors:
- Associated symptoms:



Cardiac symptom review

- Site: left inframammary region
- Quality of pain:
- Duration:
- Radiation:
- Provoking factor:
- Relieving factors:
- Associated symptoms:

Cardiac symptom review

- Site: left inframammary region
- Quality of pain: sharp, severe
- Duration:
- Radiation:
- Provoking factor:
- Relieving factors:
- Associated symptoms:

Cardiac symptom review

- Site: left inframammary region
- Quality of pain: sharp, severe
- Duration: present for two weeks, wax & wane
- Radiation:
- Provoking factor:
- Relieving factors:
- Associated symptoms:

Cardiac symptom review

- Site: left inframammary region
- Quality of pain: sharp, severe
- Duration: present for two weeks, wax & wane
- Radiation: none
- Provoking factor:
- Relieving factors:
- Associated symptoms:

Cardiac symptom review

- Site: left inframammary region
- Quality of pain: sharp, severe
- Duration: present for two weeks, wax & wane
- Radiation: none
- Provoking factor: digital pressure, movement of chest
- Relieving factors:
- Associated symptoms:

Cardiac symptom review

- Site: left intramammary region
- Quality of pain: sharp, severe
- Duration: present for two weeks, up & down
- Radiation: none
- Provoking factor: digital pressure, movement of chest
- Relieving factors: bedrest, MS (given just after NTG)
- Associated symptoms:

Cardiac symptom review

- Site: left intramammary region
- Quality of pain: h
- D
- R
- P e, movement
- P bedrest, MS (given just after
- Associated symptoms: fatigue, dyspnea

The nitroglycerin test

- the use of nitroglycerin to distinguish cardiac from non-cardiac chest pain
- look for response within 5 minutes but:
- unreliable as a diagnostic tool and
- *“very low specificity”* *

* Steele Can J Emerg Med 8:164, 2006

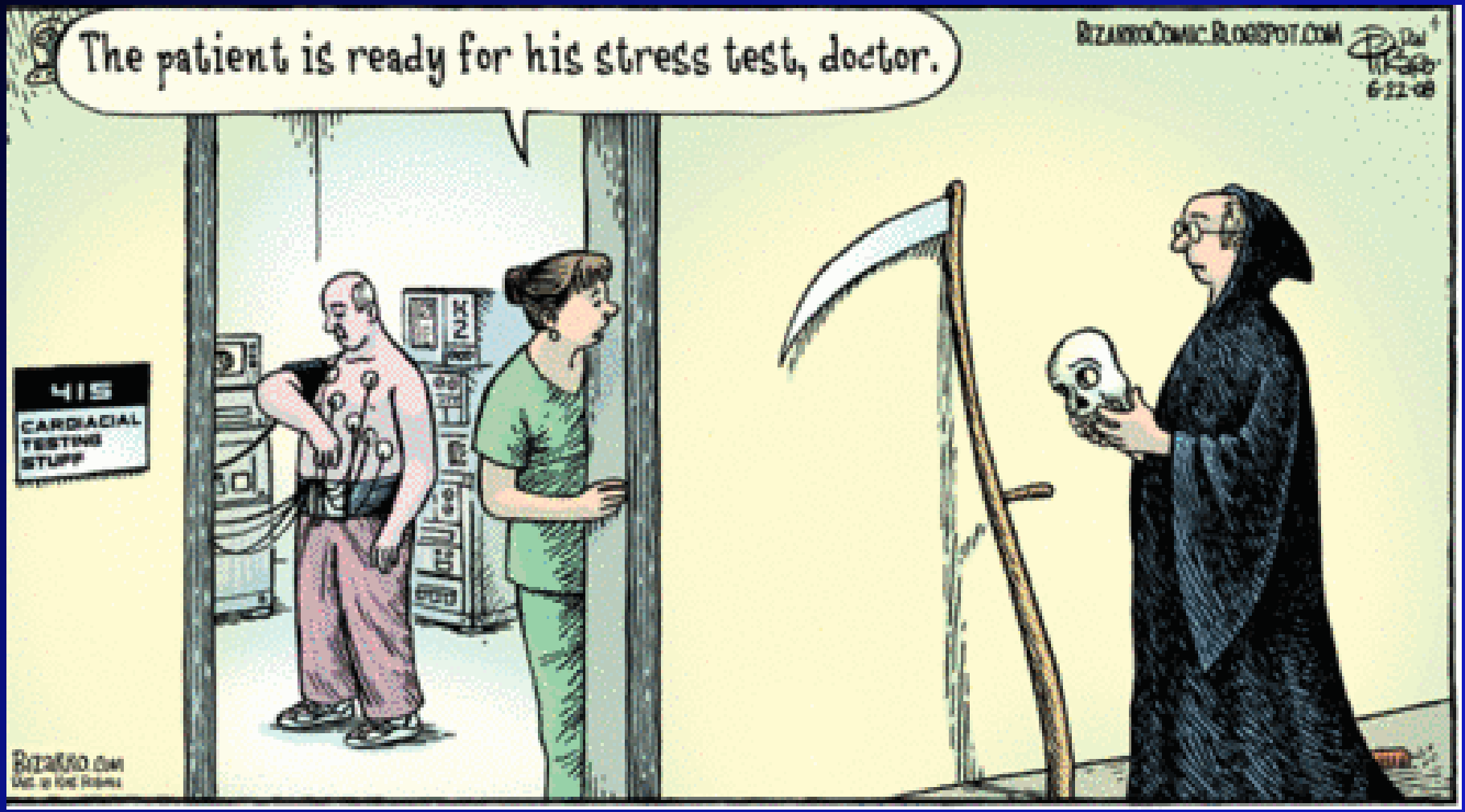
Non-cardiac chest pain (NCCP)

- Psychologic co-morbidity common (>30%)
  - *panic disorder, anxiety, major depression*
- Relief by GI cocktail predictive of response to PPI
- Upper GI endoscopy in NCCP of limited use

Non-cardiac chest pain (NCCP): coming to an ED near you!

- One-quarter of all adults: a major issue
- Younger and more anxious than CAD pts
  - more EtOH, tobacco than population
- Long-term CV prognosis is excellent
- Despite negative cardiac tests, they're usually NOT reassured – and they return…

Sometimes the stress test is more therapeutic than diagnostic!



Non-anginal (but cardiac) chest pain

- Pericarditis
  - pleuritic pain, worse if supine
- Dissecting aneurysm
  - tearing, migratory pain
- Myocardial infarction
  - similar to angina, but lasting longer than 15 minutes, often with nausea & diaphoresis

Atypical presentations of ischemia

- Women
  - chest pain less often than men (70% vs 83%)*
  - atypical locations for distress *(back, neck, jaw)*
  - more associated symptoms *(GI, constitutional)*
- Elderly
  - unexplained confusion
  - chest pain less often – *the source for the gender difference noted above?*
- Diabetes - *"beware of prolonged nausea"*

* Canto Arch Intern Med 167:2405, 2007

Dizziness

Dizziness

- Common: 2.6 million medical visits yearly
- Symptoms imprecise – timing & triggers
- Careful history to exclude vestibular or cerebrovascular disease
- Include orthostatic BP in exam
- Rhythm monitoring in selected patients

Mayo Clin Proc 82:1329, 2007

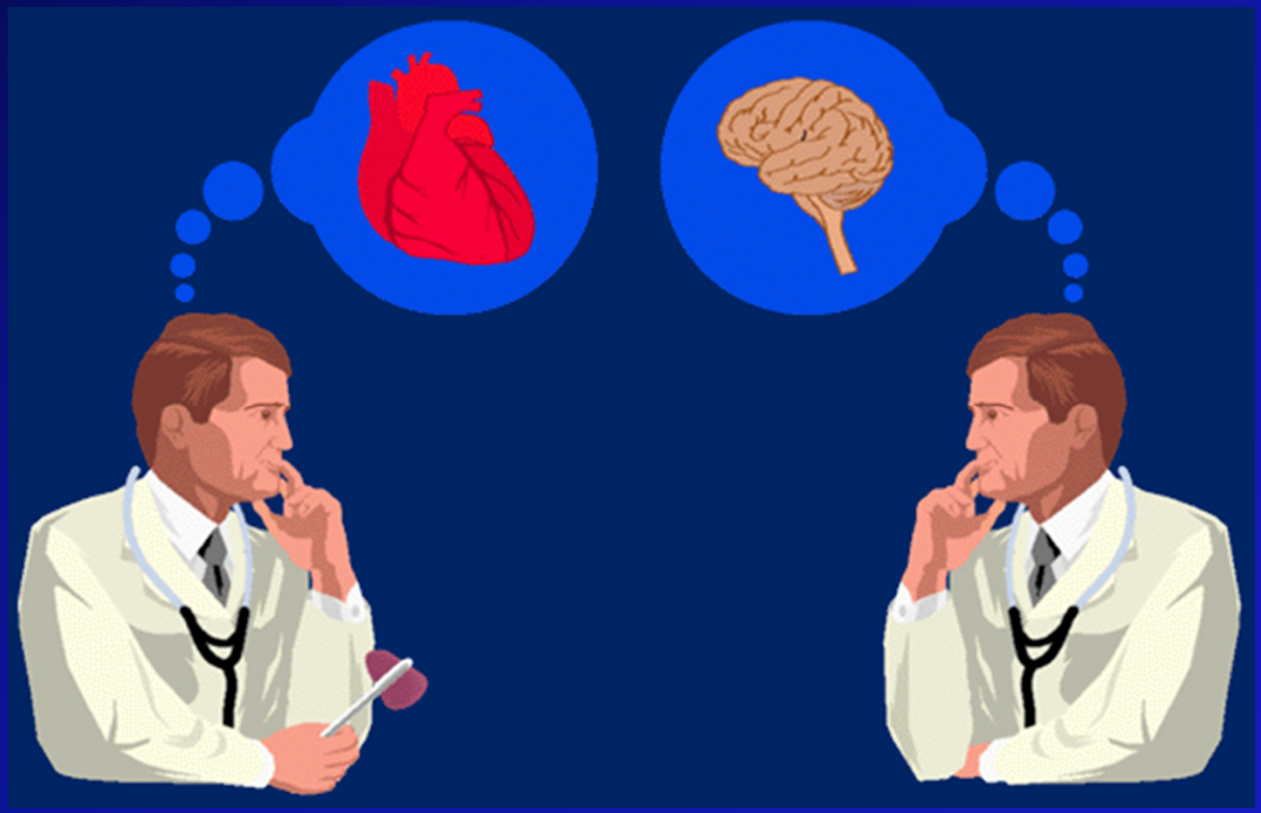
Syncope

- 1.5 million medical visits yearly in US
- 3% of ER visits
- 25% of us will “sink” at some point
- Of recurrent syncope, 40% will change jobs, 75% will have depression / anxiety

Syncope in my practice…

Yield from the initial history, exam & ECG: 40-75%.

One third of all syncope patients will have an undetermined etiology despite testing.



Neuro

Card

Syncope: High vs. Low Risk

High Risk

- CAD, previous MI
- CHF
- Age >65
- Abrupt onset
- Associated injury
- Abnormal ECG, SAECG
- LVEF <40%, structural abnormality

Low Risk

- Isolated episodes with structurally normal heart
- Age <65
- Symptoms consistent with vasovagal syncope (spaghetti syncope)
- Normal ECG
- Normal EF

Palpitation (cadence?)

- May be produced by true alterations in heart rhythm or rate, but….
- May also be a manifestation of heart failure, fatigue, or anxiety.
- Ask about associated symptoms (pre-syncope, syncope, chest pain, dyspnea)
- If they have checked their pulse, ask if the rate is fast, slow, normal, irregular, or simply more forceful than usual.
- Correlate symptoms with monitor: asymptomatic ectopy is common on Holter!

Peripheral edema: a sign and a symptom

- Common; may be physiologic
- May be local or central; venous or lymphatic
- Ask for pattern, symmetry
- Be aware of lipedema!

Cyanosis

- Bluish discoloration of skin from desaturated hemoglobin
- Need about 5 gms of desaturated hemoglobin to create cyanosis:
  - *absent in desaturation with severe anemia*
  - *may be present in polycythemic pts with normal sats*
- Central cyanosis: poor oxygenation (any cause)
- Peripheral cyanosis: vasoconstriction

Cyanosis: profound circulatory compromise

Cough & Hemoptysis

LA pressure rises with left heart dysfunction

Fluid into alveolar spaces when mean LAP > 25 cm H2O

Cough results - sometimes hemoptysis if pressure rise is sudden and severe

Hemoptysis also from Eisenmenger, PPH

Claudication

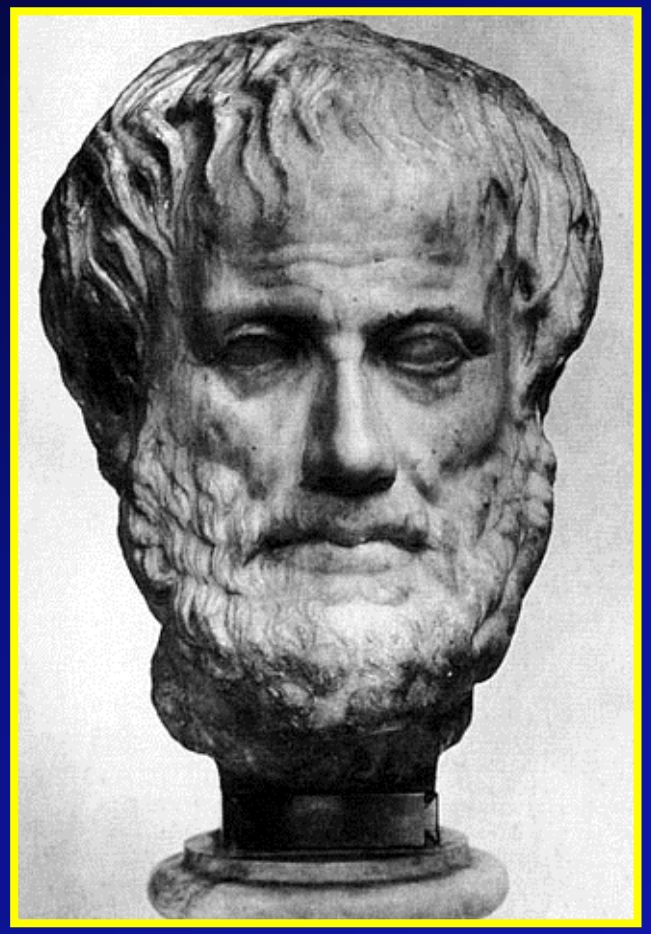
- Ischemia from peripheral artery disease
- Exertional aching in legs or buttocks
- NYHA class used for gradation
- Relieved by stopping, not sitting!
  - *spinal stenosis may cause similar symptoms but must sit for relief*

Fatigue

- Present in everyone
- DDX includes all diseases and meds
- Often creates fear re: heart failure
- CAN be due to low cardiac output, but symptom is very non-specific

Learning Objectives

- Develop a consistent comprehensive interview strategy
- Identify key chief complaints that may be clues (chest pain, palpitations, syncope, etc)
- Identify tools and strategies (propmpt sheet, first question, PFAC, life changes, pt, perception, etc)



We are what we repeatedly do. Excellence, then, is not an act, but a habit. - Aristotle

Resources

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