

Week 4 IHuman constance Barn, 70 yrs old, dsypnea

Good Questions: (all are good questions if not indicated) 91% even with bad questions

ihuman is stupid!

- lol retweet

Lol agreed

1. How can I help you today?

Having trouble breathing

2. Do you have any other symptoms or concerns we should discuss

Like what sort of things. I'm 70 after all

3. When did your difficulty breathing start?

4. Does anything make your difficulty better or worse?

Better? Cant really think of anything there. Just activity. I mean the more I do, the worse it gets.

5. Are you short of breath when lying down?

No, I feel fine lying down. I often watch the TV in bed at night and feel great then.

6. Are you short of breath at rest?

No, When I am sitting around I feel perfectly fine.

7. Do you sleep with pillows to help you breathe?

No. Well, I should say, of course I use a pillow when I sleep, but just one.

8. Do you have any pain or symptoms associated with your difficulty breathing?

Pain? Like are you asking it hurts to breathe in and out? No, I cant say that.

9. How severe is your difficulty breathing?

Pretty severe, I guess. I wouldn't have come here if it wasn't really a problem for me.

10. Do you have a wheeze?

No

11. Do you become short of breath with exertion?

Oh yes indeed Over the last year I find I have to stop half way up a flight of stairs. I never had to do that before. And recently I even get short of breath while doing my grocery shopping. Isn't that something? Do you think its just my age and what can I expect at this point in life?

12. Do you awaken at night short of breath?

No, never

13. Does anyone in your family have had difficulty breathing?

No, no one else.....

14. Do you faint or feel like you might faint?

Right now? Not right now, no

15. Do you have a problem with fatigue/tiredness?

Well perhaps a little, but I am 70 yrs old, what do you expect from an old lady!

16. Have you been having fevers?

No

17. Have you noticed swelling in any part of your body?

Yes.....Little swelling in my ankles and feet at the end of the day.

18. Do you have a problem with generalized weakness

No not really, but of course I am not as strong as I used to be.

19. Do you have a cough?

No

20. Do you have unusual heartbeats?

No never had that

21. Do you have the sensation of a "pounding heart" in your chest?..

No

22. Do you have any pain in your chest?

No.....

23. Does your chest feel tight or heavy?

No

24. Can you tell me about any current or past medical problems you have had?

HTN, osteoporosis

25. Do you have high cholesterol?

No

26. Do you have heart disease and/or have you ever had a heart attack?

No

27. Do you have a history of heart failure (HF)?

No

28. Have you ever been told that you have a heart murmur or valve problems?

No

29. Do you have asthma?

No.....

30. Do you have a history of lung disease?

No

31. Do you have diabetes?

No.....

32. Do you now or have you had cancer?

No but my mom did. Died of Glioblastoma multiforme

33. Any previous medical, surgical or dental procedures?

No, but fillings

34. Have you ever been hospitalized?

Only had children

5. Do you have any allergies?

No

36. Are you taking any prescription medications?

Sure but just a coupleAmlodipine 10 mg QD, Alendronate 70 mg once a week.

37. Are you taking any over-the-counter or herbal medications?

Calcium for my bones about 1200 mg QD, Vitamin D 800 IU QD

38. Are there any diseases that run in your family?

No

39. Do you drink alcohol? If so, what do you drink and how many drinks per day?

No

40. Do you now or have you ever smoked or chewed tobacco?

No chew, smoked a pack a day from 19 yrs-45yrs

41. Have you ever fainted?

Fainted two months ago. Chasing grandson and suddenly felt dizzy and fainted. Told her she had a vagal spell.....

42. Were you short of breath just before you fainted? Not that I remember when it happened that time I was chasing my grandson. (type a couple times and then

43. the questions will popped up.. It is weird)

44. Have you had TB? no

No

45. Do you have a family history of blood clots in your legs or lungs (pulmonary embolism)?No

46. Do you have a history of deep vein thrombosis or pulmonary embolism?

No

47. Have you ever been diagnosed with thyroid problems? No
48. Have you recently traveled? No
49. Do you have chills? Never
50. Have you been diagnosed with a bleeding disorder? No
51. Have you had chicken pox, measles or rheumatic fever? no
52. Are you eating a lot of salty foods? No
53. Do you have muscle pain or cramping? no
54. Are up to date with your immunizations, flu, pneumonia? (Bad question)
55. Do you have any problems with movement? No
56. Do you have any difficulty performing activities of daily living?No
57. Do you have a problem swallowing?No
58. Do you have a family history of heart disease? no
59. Have you lost or gained weight unintentionally? (Bad 0question)****
60. Do you feel your muscles are tense? no
61. Do you have arthritis? No
62. Are you having difficulty sleeping? (Bad question) ***
63. Do you or have you had any stomach, intestinal or bowel problems? From Ros (Bad question) ***
64. Do you have pain/discomfort when you urinate? From Ros (Bad question) ***
65. Do you have difficulty chewing? GOOD QUESTION no
66. Do you have any skin problems? (Bad question) ***
67. Do you feel anxious? (Bad question)
68. Is your voice hoarse? No
69. Have you noticed any trouble with your speech? No
70. Have you been eating anything out of the ordinary? No
71. 53. Did you have strep throat as a child?No

72. Did you ever have any involuntary strange dance like movements? no

73. Do you have a history of heart disease (good question)

Extra questions for EMR **NOT GOOD QUESTIONS**

1. Do you have any children, spouse, significant partner? Yes I am married with 3 sons alive. I had one baby who died at 1 y/o from a lung infection
2. Tell me about your work: I am retired now. I used to teach history and I loved it.
3. Tell me about the health of grandparents, parents: my grandparents are both gone now. One of my children died at 1 y/o from pneumonia. My other children are of course all grown up and fine.
4. Pap smear: 2 years ago and it was Okay
5. Immunizations: UTD no shingles vaccine
6. Mammogram: it must have been 3 years ago. It was normal for my age
7. Colonoscopy 10 y/o: normal

Physical exam: 70%

*****IF YOU GO DOWN THE PE LIST AND DO THEM ALL, IT WILL GIVE YOU A 90+% SCORE**

1 Temperature: 96.8F,

36.0C 2 Oxygen: SpO2:

97%

3 Respiration-14, regular, unlabored

4 Bp- 146/88 left arm and right arm, normal pulse pressure, elevated **** I think it needs to be all arms and orthostatic BP too

I got 144/88 standing/orthostatic in both arms

5 Pulse- 88 bpm, regular, normal

6 Inspect skin all over: Skin warm and dry, no lesions seen

Inspect hair color, distribution, thickness: thickness and distribution pattern typical for patient gender

7 Inspect nails: Nails without ridging, pitting or

peeling 8 Test cap refill: Normal capillary refill

9 Inspect eyes: Eyelids; no ptosis erythema or swelling, conjunctivae: pink, no discharge, sclerae: anicteric, orbital area: no edema, redness, tenderness or lesion noted

10 Inspect ears: Normal appearing external structures, no deformities or edema, no discharge noted

Otoscope findings: External auditory canals without erythema or cerumen, tympanic membranes translucent, non-injected & pinkish-gray in color; no scarring, discharge, or purulence noted; landmarks visible.

11 Ophthalmoscope: red reflex bilaterally, optic disks sharp

12 Inspect nose: No discharge or polyps, no edema or tenderness over the frontal or maxillary sinuses

13 Look up nostrils: No polyps or discharge

14 Inspect mouth /pharynx: Oropharynx not injected, clear mucosa, tonsils without exudate, tongue pink, symmetrical, no swelling or ulcerations

15 Inspect neck: No visible scars, deformities or other lesions, trachea is midline and freely mobile, no asymmetry or accessory respiratory muscle use with quiet breathing.

Ask patient to swallow: Normal exam; thyroid moves with swallowing

16 JVP: Normal jugular venous pressure (JVP)

17 Auscultate carotid arteries- abnormal, medium pitched murmur? - heard normal for all arteries 3/26-11am

18 Lymph nodes: No pathologically enlarged lymph nodes in the cervical, supraclavicular, axillary or inguinal chains

19 Visual inspection of chest: Unremarkable

20 Palpate chest: No tenderness, masses, heaves, thrills, or

crepitus. 21 Percussion: Normal

22 Auscultate lungs-normal

23 Auscultate heart sound: Should hear harsh murmur in the 2nd intercostal space. - mid systolic murmur— (Late systolic)

24 Visual abdominal inspection: Abdomen is flat and symmetric with no scars, deformities, striae or lesions

25 Bowel sounds-normal active

26 Palpate abdomen: No masses, not tender, no hepatosplenomegaly

(HSM) 27 Palpate extremities - bilateral +1 pretibial edema

28 Visual inspection extremities-edema: Bilateral edema in feet and

shins (weak peripheral pulses per CPG book)

29 ROM: Normal, equal bilaterally

30 Strength: 5/5

bilaterally 31 Balance

test: normal

32 Auscultate abdominal and femoral arteries-abnormal

33 Examine pupils: normal reactive on both eyes

34 Look in ears with otoscope: TM translucent, pinkish-gray in color, no scarring, discharge or purulence noted, landmarks visible

35 Palpate neck: Thyroid firm, an acceptable size for patient gender and age, no nodules palpated

36 Palpate for PMI: PMI quarter-sized, brisk, and tapping in the 5th ICS at MCL

37 MMSE: 3/3 registration and recall. Attention intact. Names 2/2 objects accurately. Able to follow multi-step commands. Spatial and executive function intact on drawing task. Score 30/30

38 DTR/2+ everywhere

39 Quincke's test- blanching observed

40 Inspect face- normal expression; no lesions, scars or abnormal pigmentation

41 Examine pupils- normal reactive

duplicate 42 Inspect ears: Normal duplicate

43 Look in ears with otoscope: normal duplicate

45 Dynamic auscultation: no significant change while standing, squatting, during Valsalva maneuver or with sustained handgrip.

46 Auscultate abdominal/femoral arteries: abnormal

47 Percuss abdomen: No tympany or shifting

dullness 48 Test stability: Normal

49 Assess gait and stance: Normal gait and posture

50 Look for involuntary movements: none of these- fibrillations. Fasciculations. Asterixis. Tics, myoclonus. Dystonias. Chorea. Athetosis. Hemiballisms. Nor seizures.

51 Ankle brachial pressure index: Normal 1.0 to 1.4 ratio of ankle to brachial BP

52 Normal breast exam. Breasts and nipples non tender. No masses lumps, deformities, ulcerations or discharge

Key findings:

- 1 Dyspnea (MSAP)
- 2 Fatigue
- 2 Ankle swelling
- 4 Vasovagal 2 months prior
- 5 1+ bilateral pretibial edema
- 6 Abnormal carotids - (I couldn't hear any abnormalities 3/26-11am?)
- 7 Abnormal abdominal/femoral arteries- (I couldn't hear any abnormalities 3/26-11am?)
- 8 Murmur
- 9 26-year 1PPD former smoker
- 10 hyperactive bowel sounds – really? - seriously lol
- 11 History of HTN & osteoporosis

Differentials: (85% and Ranking also):

- 1 Aortic stenosis (LEAD/mnm)
- 2 COPD- ALT/mnm
- 3 Asthma- alt/mnm
- 4 Heart failure/CHF- ALT/mnm
- 5 Acute coronary syndrome- alt/mnm
- 6 PE- alt/mnm
- 7 Anemia- alt
- 8 MI- alt/mnm
- 9 CAD- alt/mnm
- 10 Afib- alt/mnm
- 11 Mitral regurg- Alt/mnm
- 12 Cardiomyopathy/hypertrophic- alt/mnm
- 13 Pericarditis- alt/mnm
- 14 Mitral valve stenosis- alt/mnm

15 Aortic Regurgitation- alt-mnm

16 GAD- alt

17 Pneumonia- alt

18 HTN/pulmonary- alt

19 Aflutter- alt

20 TIA- alt

21 OSA- alt

22 CKD- alt

23 Heart Block- alt

24 Hyperthyroidism- alt

25 Hypothyroidism-alt

26 Pleural effusion-

alt 27 Deconditioning-

alt

28 Ischemic heart disease-alt

29 Achondroplasia-alt -

dwarfism? BFFR. Nah.

30 Angina, stable-alt

31 Carotid stenosis-alt/MNM

32 Neurocardiogenic (vasovagal) syncope-alt

33 atherosclerosis-alt

(MNM 69%)

If you write Pulmonary Embolism -ALTERNATIVE/MNM. Aortic Stenosis/ LEAD/MNM

For MNM I had PE (alt), aortic stenosis (Lead also), and mitral stenosis(alt) = 77% which only loses 0.5pts in the rubric

Everything else would be

Alternative **Diagnosis**: Aortic stenosis

100% **Testing**: 100%

1 TTE- abnormal (Moderate LVH, EF 70%, elevated left atrial volume, and severe aortic stenosis)

2 12 lead ECG: NSR, LVH

3 CXR PA and Lateral- unremarkable

4 BNP- WNL

5 ABG- PaO₂ 82% slightly low

6 CBC- normal

7 PFT- FEV₁/FVC 90%

8. Cardiac Nuclear Stress test, Lexiscan

- Normal

9. Coronary Angiogram (catheterization)

- Severe aortic stenosis (AS) with valve area <0.6cm²
- Coronary arteries are patent without significant stenosis

10. Transesophageal echocardiogram (TEE)

- Left ventricle:
 - Moderate LVH
 - EF 70%
 - No regional wall motion abnormalities, abnormal diastolic performance, elevated left ventricular end diastolic pressure (LVEDP)
- Left atrium:
 - Elevated left atrial volume
- Mitral valve:
 - Normal aortic valve
 - Trileaflet with severe sclerocalcific changes, mean gradient consistent with severe aortic stenosis, estimated valve area consistent with severe/critical aortic stenosis 0.65 cm²

11. Holter monitor

- Normal

12. Peak Expiratory Flow

- Normal

Per the CPG Book- Dx testing includes: Cardiac auscultation, Electrocardiogram, CXR, TEE, Stress echocardiography, angiography, cardiac cath, CT, Physiologic maneuvers including: Respiration (rapid inspiration and expiration will change heart sounds), Abrupt standing and squatting, valsalva, hand grip, post extrasystolic potentiation

Management plan:

Diagnostic tests: TTE, (((EKG?? CARDIAC CATHETERIZATION??)))

Medications: Furosemide 20 mg PO daily

(diuretic must be used with caution because patients with severe aortic stenosis are preload dependent and they can develop low cardiac output and arterial hypotension)

Ramipril 10 mg PO daily (slow the progression of calcification and improve left ventricular hypertrophy)

(Beta blocker have the risk of negative inotropic effect in the presence of ventricular outflows tract obstruction)

Atenolol 25 mg PO BID (Are these all in addition to the medications she is currently taking? Which already includes Amlodipine for BP—amlodipine can cause edema—cardiologist friend said to stop amlodipine) Amlodipine should be stopped ACE inhibitors are best choice

Patient Education: Do not stop any medication abruptly. Limit salt intake in diet to less than 2000 mg per day. Pt is to stop amlodipine because it can cause edema and to start new medication regimen of furosemide, benazepril, atenolol.

Non-Pharm Tx: Treat the underlying cause, patient education about disease, treatment options.

No Pharm treatments, Pharm treats the symptoms resulting from murmur ie: fatigue.

Referral: Evaluation and F/U by Cardiology, cardiac rehabilitation program

Follow up: 2 weeks to see the efficacy of medication and if it needs to be titrated at all. Repeat TTE in 5 years, or sooner if symptomatic.

References:

Kang, T., & Park, S. (2018). Antihypertensive treatment in severe aortic stenosis. *Journal of Cardiovascular Imaging*, 26(2), 45. <https://doi.org/10.4250/jcvi.2018.26.e9>

Otto, C. M., Nishimura, R. A., Bonow, R. O., Carabello, B. A., Erwin, J. P., Gentile, F., Jneid, H., Krieger, E. V., Mack, M., McLeod, C., O’Gara, P. T., Rigolin, V. H., Sundt, T. M., Thompson, A., & Toly, C. (2021). 2020 acc/aha guideline for the management of patients with valvular heart disease: A report of the american college of cardiology/american heart association joint committee on clinical practice guidelines. *Circulation*, 143(5). <https://doi.org/10.1161/cir.0000000000000923>

Exercises:

1 chest pain

2

3

4

5

6

7

8 Cardiac catheterization??

9

10. Concept map: Click on get hint at the bottom...and then connect the boxes top to bottom

REFLECTION COSTS

12 LEAD	188
BNP	172
STRESS TEST	891
CXR PA & LAT	135
CBC	25
CORONARY ANGIOGRAM	581
ABG	474
TEE	1774
TTE	1701
HOLTER	307 (https://www.mdsave.com/procedures/holter-monitoring/d783f8cc)
PFT	569
LEXISCAN	2296

TOTAL \$6631