



*Heart
Talk*



**BEDSIDE ASSESSMENT
OF THE CARDIOVASCULAR PATIENT**



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Course Objectives & Outline: Upon completion of this course, the participant should be able to demonstrate an understanding of each of the topics presented within.

- CV Assessment begins with the patient interview
- Risk factor control
- Mental acuity
- Targeted physical assessment
- Inspection – head to toe
- Jugular veins
- Neck veins - Jugular venous pressure
- Hepatojugular Reflux
- Blood pressure measurements
- Pulse pressures
- Peripheral vascular assessment
- Ankle-Brachial index
- Pitting edema
- Lung sounds
- Heart chambers and valves
- Using the stethoscope
- Areas of listening
- First and second heart sounds
- Atrial and ventricular systole
- Normal heart sounds S1 and S2
- Third and fourth heart sounds
- Summation gallop
- Identifying systolic and diastolic murmurs
- Grading heart sounds

Cardiovascular Assessment Begins with the Interview



Interview:

- Chest pain
- Dyspnea
- Cough
- Headache
- Ascites / Abdominal pain
- Edema / weight gain
- Fatigue / weakness

Schema for Taking History of Chest Pain:

REMEMBER THE “ P-QRS-T”

- P**ain Pain onset?
- Q**ualitative Is it really pain?
What sort of pain is it?
How severe is it?
- R**elative Associated symptoms?
Relieving factors?
Aggravating factors?
- S**patial Where is it?
Diffuse or localized?
Deep or superficial?
Radiation?
- T**emporal How long have you had it?
How long does it last?
Special times of occurrence?

Interview Continued:



- Syncope / pre-syncope
- Palpitations
- Hemoptysis
- Intermittent Claudication
- Nocturia - urinary frequency at night
- Diaphoresis
- Joint pain
- Calf tenderness
- Varicose veins
- Past medical history
- Medication / drug history
(prescribed & non-prescribed)



GOALS: Major Risk Factor Control

- Age
- Sex
- Heredity (family history & race)
- High Blood Pressure
- ↑ Cholesterol / Lipids
- Tobacco Smoke
- Diabetes Mellitus
- Physical Inactivity
- Overweight & Obesity
- BP \leq 110/70
- T Chol < 200
- HDL-C > 53 M/ 67 F
- LDL-C **<160** if no evidence of CVD/Diabetes/Risk Factors-no treatment yet)
 - <130** (OK with 2 Risk Factors-no treatment yet)
 - <100** is acceptable range if there are risk factors for CVD along with known CVD)
- No smoking, FBS < 110
- Exercise
- Normal weight

Bedside Assessment



Mental Acuity/Emotional Status: Physical Appearance:

- Alertness
- Orientation
- Clarity of speech
- Ability to follow commands
- Anxiousness/restlessness
- Different than before?

- Struggling
- Diaphoretic
- Dyspnea
- Skin color
- Posture: sitting upright,
unwilling to lie down hand
motions toward chest

Perform a Targeted Physical Examination in 10 Minutes



Put the spotlight on the heart!

Assess:

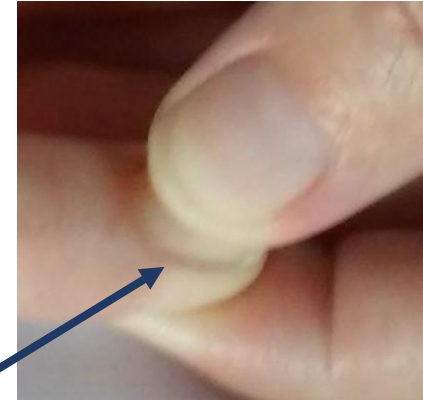
- The heart's ability to perfuse organs
 - The circulating volume status
 - The cause of any cardiac dysfunction
 - Any compensatory mechanisms in place for self preservation
- Quickly assess the patient's breathing status; provide relief if needed
 - Measure height & weight
 - Assess heart rate and rhythm
 - Carefully assess BP sitting and standing and in both arms if syncope or dizziness is described
 - Count respiratory rate & auscultate lung sounds
 - Obtain temperature
 - Examine sclera and oral mucous membranes
 - Assess jugular venous distension
 - Assess abdominal jugular reflex
 - Inspect extremities for color, temperature, edema, capillary refill, and pulses

Inspection



1. Check fingertips and nail beds for:

- ❑ Capillary refill within 3 seconds – depress the nail firmly and release; watch for the blood to return to the nail bed within 3 seconds.
- ❑ Clubbing of the fingers which could indicate: Cardiac, GI, Hematologic, or Pulmonary Disease.



Pressure is applied to the nail bed until it turns white.



Blood should return to the nail bed within 2-3 seconds.



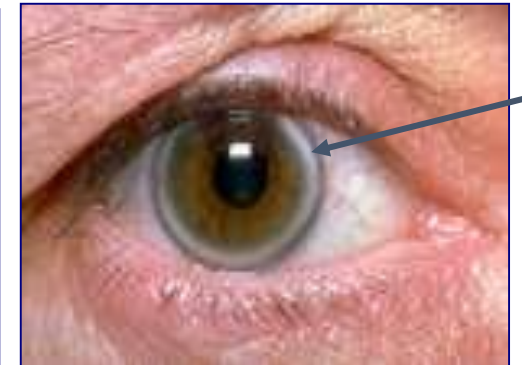
Clubbing of the fingers

Inspection

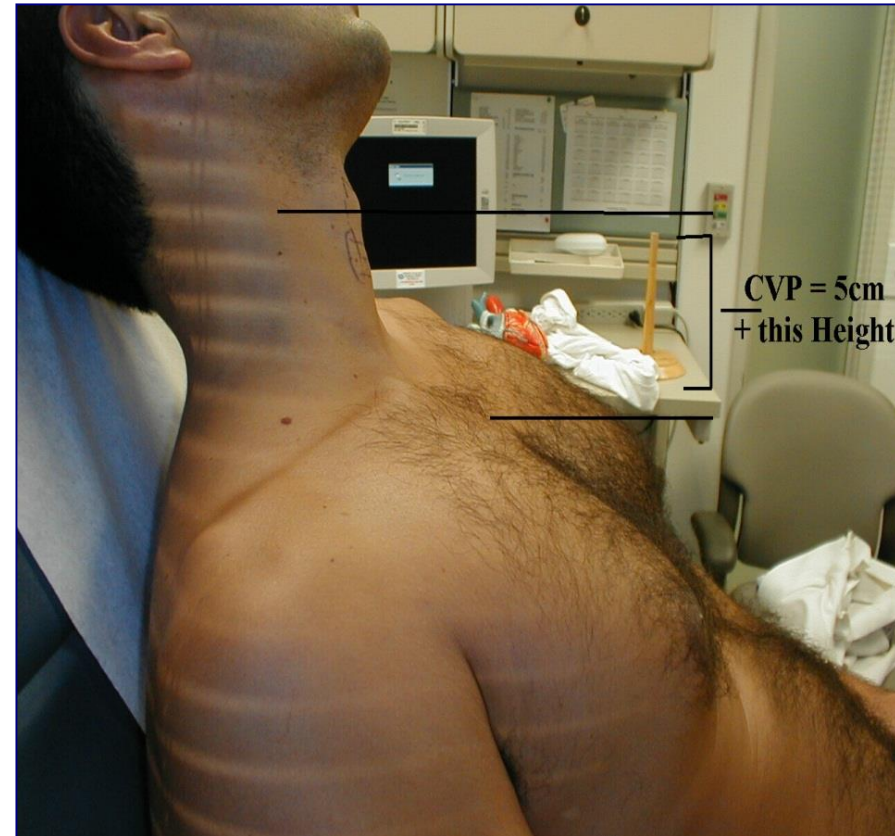
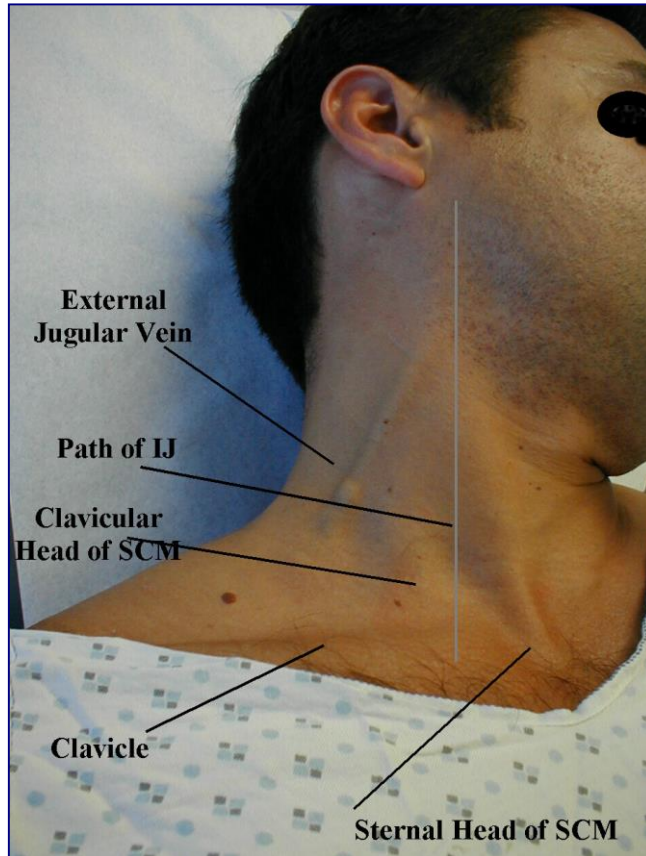
- **Head & neck, particularly the Eyes for:**

- ❑ Xanthoma (fatty streaking visible just under the skin under the eyes) – an indication of hyperlipidemia
- ❑ Corneal arcus or a grayish ring around the eyes – another indication of hyperlipidemia

Start looking at patients eyes for the fatty deposits above or below the eyes and the grayish ring around their cornea.



Inspect the Jugular Veins for Distention



Head & Neck: Jugular Venous Pressure



Internal jugular vein is in direct communication with the right atrium

How to Measure Jugular Venous Distention:

Patient at 45° angle

Measure from Sternal angle to highest level of JV pulsation

JVD \geq 5 cm abnormal:

- RV Failure**
- Cardiac tamponade
- Constrictive pericarditis
- SVC obstruction
- Increase intrathoracic pressure (PEEP, coughing)

