Jugular Venous Pressure Examination

Wash your hands & Introduce the exam to your patient

Position & Draping
- place the patient at ~30° Head up tilt (HUT)
- expose their neck fully
- get the patient to turn their head slightly to the left
- relax the sternocleidomastoid muscle (SCM) by telling the patient to open their mouth slightly
  ➢ NB - proper tangential light is critical

Inspection
- from the right side of the patient, look between the 2 heads of the SCM for a pulsation
- the differences between the Jugular Venous Pressure (JVP) and the carotid pulse:
  o the JVP has multiple wave forms
  o the JVP is not palpable
  o the JVP is occluded by light pressure at the base of the neck
    ▪ (ie) if you occlude the internal jugular vein, the pulsations will stop
  o the JVP varies with respiration
  o the JVP varies with changes in HUT
    ▪ basically, if you raise or lower the head of the bed, the JVP should decrease or increase respectively

Measuring the JVP (see Figure 1)
- use 2 rulers
  o one vertical at sternal angle of Louie
  o one horizontal to the pulsation
- use the vertical height at the intersection of the rulers to determine level of the JVP
- record/report your measurement as follows: “JVP was X cm at 30° HUT”
Figure 1: Measurement of the Jugular Venous Pressure

Special Maneuvers
- **Abdominojugular reflex (AJR) test**
  - place firm pressure on the abdomen for 10 seconds. This can be done by either:
    - using your hand directly
    - placing your hand over a pre-inflated blood pressure cuff and applying 20-35 mmHg of pressure (as measured by the pressure gauge on the cuff)
  - watch the JVP
    - normally it should remain unchanged or increase initially, then return to normal levels within 10 seconds
    - it is **abnormal** for the JVP to remain elevated. If the JVP remains elevated for the entire 10 seconds, the AJR test is positive

  ➢ **NB:** it is very important that the patient is **breathing normally** during this procedure. If they Valsalva, this will give a false reading.