http://ccm.anest.ufl.edu/education/ultrasound

In hypovolemic patients, even small amounts of pressure can collapse the vein, use more gel if this occurs, there will be less tendency to place pressure on skin to obtain better view/surface contact

1. If too much pressure is placed on the internal jugular vein, you may cause:

A. Clot formation in vessels
B. Failure to see the artery
C. Collapse of the vein
D. Dislodging of carotid plaques

Name:

All of these are good maneuvers to increase volume in vein, but optimize positioning of head is probably the most permanent while line placement

Quest

2. Which of the maneuvers tend to increase the size of the internal jugular vein?

A. Valsalva maneuver
B. Trendelenburg position
C. Optimize head position under ultrasound guidance
D. All of the above

In a recent article, it was shown in a simulation study that operators perforated the vein 20% of the time and were able to get a return of flow 'while pulling back'. This shows the importance of following your needle tip all the way into the vessel

3. Which of the following is a disadvantage of the transverse approach to cannulation of the IJ vein?

A. Short learning curve
B. Protects perforation of posterior wall
C. Good for short necks
D. Easy to visualize relationship of vein and artery

The needle is actually well visualized in the longitudinal approach. Even though the artery is not visualized remember if you see your needle and you see your vein, you will not be hitting artery on the way there. Also remember in this view, do not adjust the probe to find the needle, adjust the needle to find the probe (once vein is visualized keep it in view at all times)

4. Difficulties of using the longitudinal approach for IJ access include:

A. More technically challenging than the transverse view
B. Needle poorly visualized
C. Carotid artery is not visualized during cannulation
D. A and C

5. What is the first step in evaluation of internal jugular veins?

A. Obtain longitudinal views
B. Place significant amount of pressure to increase the size of the vein
C. Obtain transverse view of the vein
D. Exam only in one area, no need to scan the length of the vessel

First step in obtain transverse view, then scan up and down the length of vessel in search of abnormalities/clots, then you can place in long view to obtain access if desired