Direct Arterial Pressure Monitoring

Supplies Needed:
100ml or 250ml bag of 0.9% NaCl with macrodrip set, sterile transducer set (includes dripset, transducer, and plastic extension set), SurgiVet monitor

When measuring direct arterial pressure a t-port should not be used. The plastic extension set should be connected directly to the catheter.

1. Hang the 0.9% NaCl bag and connect it to the drip set and transducer, connect the transducer to the monitor, connect the plastic extension set to the transducer.
2. Open all ports and 3-way stopcocks to flush all of the air out of the system (make sure the 3-way stopcock is 'off' to the orange capped port while flushing the system). You will need to squeeze the light blue area of the transducer to allow fluid to pass through. Release the blue area of the transducer so no fluid is flowing.
3. Turn all stopcocks "off" to the patient.
4. Attach the flushed system to the central line port or arterial catheter.
5. Place the transducer at the area of the patient's right atrium. This can be achieved by placing it on bedding, towels, or a sandbag. Secure it with tape.
6. With stopcocks still "off" to the patient, loosen (but do not remove) the orange cap.
7. Press the "Zero IBP" on the front of the SurgiVet and wait until it reads 0. This equalizes the pressure in the system to room air. This step must be done every time the patient or the transducer is moved.
8. Tighten the orange cap back down.
9. Open the 3-way stopcocks to the patient and you will begin to see waves and pressure readings.
10. It is a good idea to place the 0.9% NaCl in a pressure bag and squeeze the transducer to flush the arterial catheter at least once an hour. This step should be performed at least every four hours with an arterial line.