**COMPLICATIONS MANAGEMENT**

**AIR EMBOLISM**

* air into a non-collapsible vein when there is negative pressure in the vein (head above heart, i.e. sitting position)
* air becomes trapped in the right atrium which impairs venous return causing hypotension
* may also produce cardiac arrhythmias
* use right atrial CVP line in high risk cases to aspirate air in case
* monitor for air embolism – transesophageal echo (most sensitive), precordial Doppler monitoring (parasternal between 2nd and 3rd rib), end-tidal CO2, PA pressure, cardiac output, CVP
* ET CO2 will decrease suddenly within a few breaths after air embolism. ET CO2 starts to recover as embolism stops

\*\* TREATMENT:

1. find and occlude site of air entry or rapidly pack wound with wet sponges and wax all bone edges
2. lower patient’s head 30degs or less from horizontal
3. jugular venous compression (right side)
4. rotate patient left side down if possible
5. aspirate air from right atrium thru CVP line
6. ventilate 100% O2
7. d/c nitrous oxide (may expand the air embolism)
8. PEEP is ineffective