Open Nissen Fundoplication

1. Clip guidewire loop to drape near subclavian site.
2. Start at R subclavian in most leukemias as this leaves the left side free for cardiac ultrasounds.
3. After accessing vein, pass wire.
4. Make small incision at nipple level just to the side of the midline.
5. Open tunnel with snap, cut skin at wire with 15 blade. Pass catheter with the lacrimal duct probe in babies or plastic passer in older children. If for chemo, usually 7 Fr double lumen. If for TPN or antibiotics a single lumen catheter is usually adequate.
6. Leave cuff just inside the insertion site.
7. Wrap the end of the catheter in a moist gauze to keep it from touching skin and being contaminated.
8. Pass dilator over the wire first then pass dilator with peelaway introducer to prevent damage to introducer.
9. Close subclavian site with a subcuticular 4-0 monocryl (5-0 in babies)
10. Put a 3-0 ethibond on each side of exit site, tie a loose surgeon's knot then wrap and tie each around catheter to secure it.
11. Large tegaderm over exit site, steristrip and small tegaderm over subcalvian site.
12. Obtain a chest x-ray whenever there has been a subclavian puncture.
13. If a cutdown is necessary, usually start with external jugular vein. If EJ is not adequate, move to the facial vein.
14. Access facial anterior to the SCM at a point midway from sternal notch to mastoid.
15. Bevel catheter and use jewelers forceps to insert. Secure catheter in vein with 4-0 vicryl tie.
16. Close incision with deep 4-0 vicryl, 4-0 monocryl subcuticular.