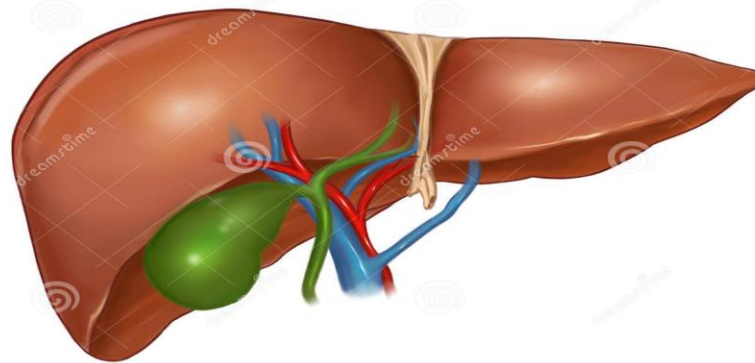


SETTING UP FOR A PEDIATRIC LIVER TRANSPLANT



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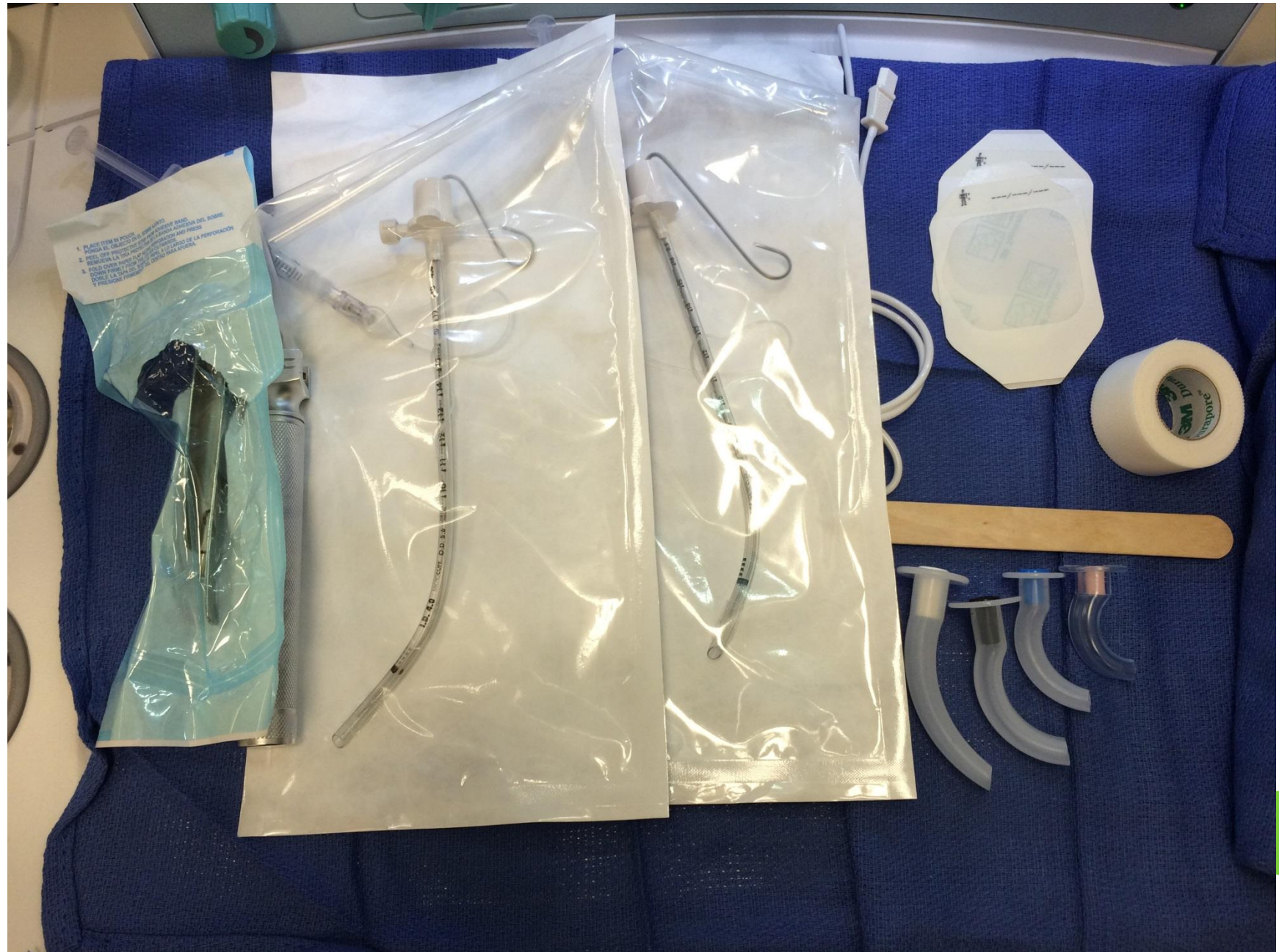
James K. Kim, MD (Resident c/o 2016)
Sudha Ved, MD, FAAP

OBJECTIVE

- To provide a thorough, yet simplified guide for an extensive pediatric liver transplantation set up.
- If you follow the video (**slide 6**) and all the pictures/diagrams on this presentation, your setup will be complete/comprehensive, and you'll be well-prepared for your case.



STANDARD PEDIATRIC AIRWAY SETUP



STANDARD PERIPHERAL IV KITS WITH FLUSHES AND GREEN ARM BOARDS



ARTERIAL AND CENTRAL VENOUS CATHETER KITS

- Central Venous Catheter 5Fr/15cm
- Cook Access Introducer Tray 6Fr/5cm
- Radial Arterial Catheter Sets: 2.5Fr/5cm and 3.0Fr/5cm

*****Have the pediatric line cart in the room.**



FLUID LINES SETUP

WATCH THIS 5-MINUTE VIDEO

(Either copy/paste link to a browser, or right click link and select “Open Hyperlink”):

<https://www.youtube.com/watch?v=VHVZEomGPy4>



INFUSIONS

(SEE FLUID LINES SETUP VIDEO)

| Drug | Concentration | Drug Dose |
|--|---------------|--|
| D10% (1000ml bag) | 100mg/ml | 0.5x maintenance rate (4-2-1 rule) ml/hr |
| Dopamine (200mg/250ml D5W bag) | 800mcg/ml | 3-20 mcg/kg/min |
| Epinephrine (2 vials of 1:1000 (2mg) into 100ml D5W bag) | 20mcg/ml | 0.05-1.0 mcg/kg/min |



INDUCTION/MAINTENANCE AGENTS

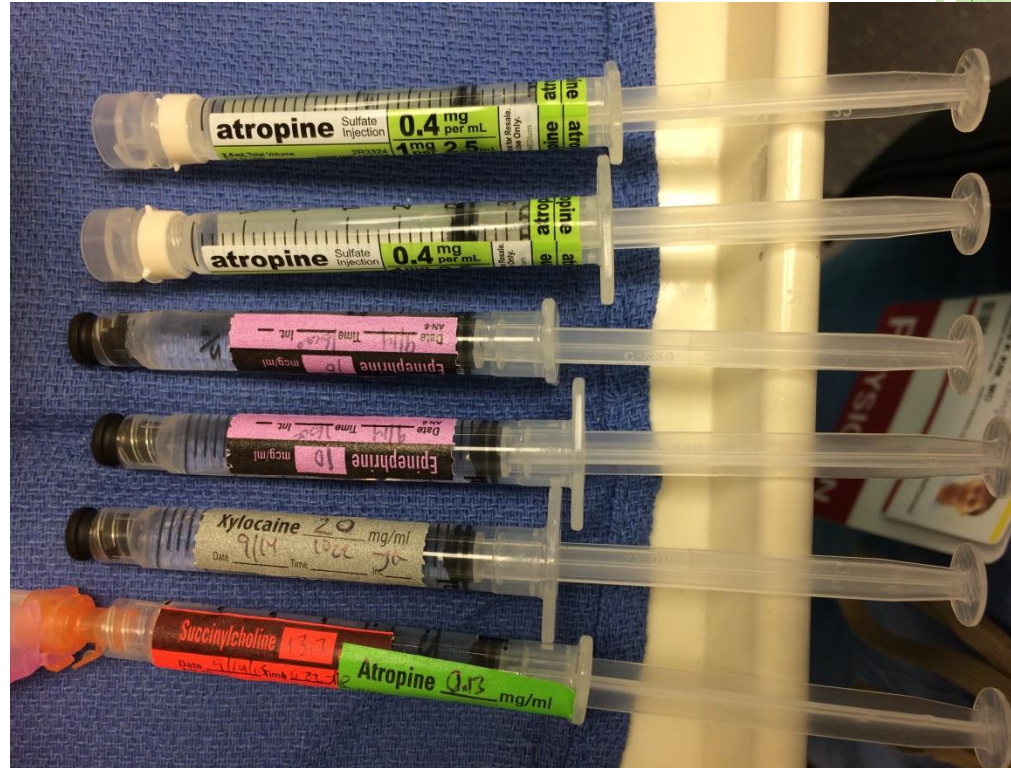
- Propofol 2-3mg/kg
- Vecuronium 0.1mg/kg
- Rocuronium 0.6mg/kg
- Lorazepam (Ativan) 0.05-0.2mg/kg
- Midazolam (Versed) 0.1-0.2 mg/kg
- Fentanyl 10-30mcg/kg (total dose)
 - **Fentanyl infusion (Mix Fentanyl 100mcg into NS 20cc syringe for a final concentration of Fentanyl 5mcg/ml, and hook up to a syringe pump.**
 - **Fentanyl Loading dose 3-5 mcg/kg, Fentanyl infusion 1-2 mcg/kg/hr**



Please use age-appropriate syringe sizes for all meds and fill them up completely (not weight-based dosing). (Example: 10kg patient should have Fentanyl drawn in 1ml (insulin) syringes

RESCUE DRUGS

- Atropine 0.4mg/ml
- Epinephrine 10mcg/ml
(1cc 1:10,000/diluted in 9cc NS)
- Lidocaine (Xylocaine) 2%
- Succinylcholine 40mg (2ml)
+Atropine 0.4mg (1ml) into a
3ml syringe



Please use age-appropriate syringe sizes for all meds and fill them up completely (not weight-based dosing). (Example: 10kg patient should have Atropine drawn in 1ml (insulin) syringes and Epinephrine in 3ml syringes



CALCIUM CHLORIDE SODIUM BICARBONATE

- Draw up FIVE syringes

of *weight-based*

CaCl₂ and NaHCO₃.

CaCl₂: 20mg/kg

NaHCO₃: 1mEq/kg

(Example: For a 10kg patient, you should have 5 syringes, each filled with 10mEq NaHCO₃, and 5 syringes, each filled with 200mg CaCl₂)



DEFIBRILLATOR PADS

- If the child weighs **10kg or less**, use pediatric pads
- If the child is **greater than 10kg**, use adult pads
 - For defibrillation: **2 J/kg**
 - For cardioversion: **0.5-1 J/kg**



ARTERIAL/CENTRAL LINE PREP/DRAPE MATERIAL

- The A-line and CVC kits do not have prep/drape material, so prepare the following:

1. Sterile CVC drape
(found in adult CVC kit)
2. Sterile blue towels
3. Sterile 4x4 gauze
4. ChloroPrep sticks
5. Biopatches
6. Small tegaderms



MORE ARTERIAL/CENTRAL LINE MATERIAL

- The A-line and CVC kits also do not contain the following:

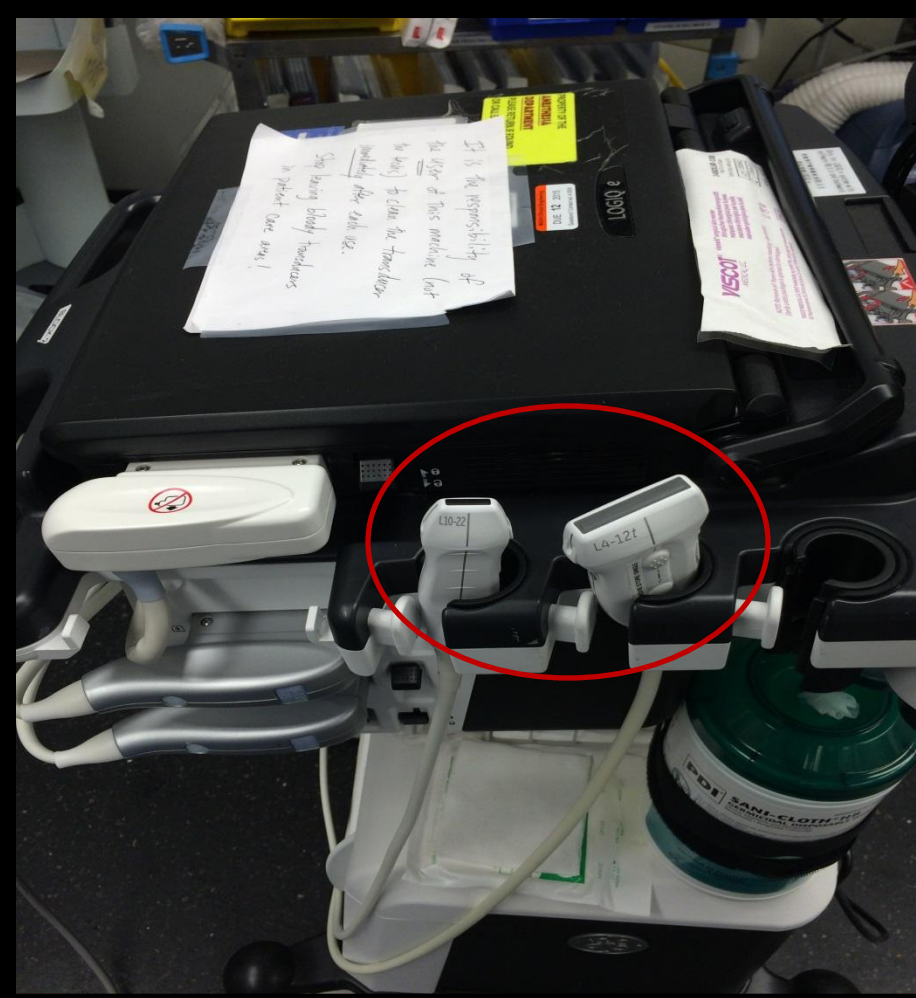
1. 4.0 Silk on SH suture
1. Needle driver
2. Scissors

****You can ask the Circulator for these 3 items.****



ULTRASOUNDS

Have both ultrasound machines in the room. Note that the newer GE ultrasound machine on the left should have **both the FLAT pediatric and adult vascular transducers (Encircled in red)**.



NOW YOU'RE READY TO TRANSPLANT!

