

Tubes and Lines Policy: Pediatric

All the Critical Findings of NICU patients should be reported to neonatology fellow beeper at 131-3792, 24 hours/7 days. (This applies to primarily tubes and lines. But inclusive of all other findings including but not limited to unexpected pneumothorax, pneumomediastinum, large effusion, CHF, free air and bowel obstruction.)

UMBILICAL ARTERIAL CATHETER
UMBILICAL VENOUS CATHETER

ABOVE T10 OR BELOW L3
DOME OF DIAPHRAM

ENDOTRACHEAL TUBE

above the carina and below the thoracic inlet. We use the area between the posterior aspect of the first rib and anterior aspect of the first rib to define the thoracic inlet

Approach/Discussion:

Umbilical Arterial Catheter (UAC) Hi Positioning - Courses to left side of spine on the AP film and posteriorly on lateral film. The tip projects between T6 and T10.

Umbilical Venous Catheter (UVC) - Courses to right side of spine on the AP film and anteriorly on lateral film. The tip projects over the junction between the IVC and the right atrium. The UVC courses from umbilical vein to left portal vein to ductus venosus to either hepatic vein or IVC and then into right atrium. The UVC tip should not be within the liver or the right atrium.

Central Venous Line (CVL) - tip in superior vena cava

Endotracheal Tube (ETT) - Below the thoracic inlet and above the carina. The ETT shifts with head position. As the head is flexed forward the ETT appears to lie lower in the trachea than it does, and as the head is extended posteriorly the ETT appears to lie higher in the trachea than it does

ECMO arterial-venous (AV) - The tip of the arterial catheter should be in the aortic arch and the tip of the venous catheter should be in the right atrium. The exact position of these tips may be difficult to determine as they are often not radiopaque.

ECMO venous-venous (VV) - The tip of the venous catheter should be in the right atrium pointing towards the tricuspid valve. The exact position of this tip may be difficult to determine as it is often not radiopaque.

Levels of the Vascular Axes

Aortic Arch - T4

Celiac axis - T10-T11

SMA - T11 Renal arteries - T12-L1

IMA - L1

Iliac bifurcation - L3

