CCT: NEONATAL PULMONARY HEMORRHAGE

PURPOSE
A. The purpose of this protocol is to address the care of neonates who are experiencing a pulmonary hemorrhage. Pulmonary hemorrhage is an acute event with bloody fluid noted in the respiratory tract, in the endotracheal tube, oozing from the nares or the mouth.

SCOPE
A. This guideline applies to all members of the Indiana University Health Lifeline Critical Care Transport Team.

EXCEPTIONS
B. Any exceptions to this policy must be approved by the Neonatal Control Physician.

DEFINITIONS
Colloid: Type of intravenous fluids with high osmolality that are ideal to transfuse in condition with decreased intravascular volume and include blood and albumin.
Positive End Expiratory Pressure: measured pressure used during expiration to increase the volume of gas remaining in the lungs at the end of expiration.

GUIDELINES
A. Bedside caregivers should not delay treating neonates with signs or symptoms of pulmonary hemorrhage and call the control physician once patient is stabilized.

PROCEDURES
A. In patients with signs or symptoms of pulmonary hemorrhage consider administration of endotracheal Epinephrine (1:10,000)
   a. Epinephrine- draw up 0.1ml/kg per ETT and administer once
   b. Follow with 0.5ml of sterile saline to flush medication into lungs
   c. If bleeding continues repeat endotracheal Epinephrine increase dosage to 0.3ml/kg per ETT once
B. Fluids resuscitate with colloids starting with 10-20 ml/kg IV.
C. Increase peep by 1-2 cm, as long as no air leak in present in patient.
D. Obtain blood gas and baseline hematocrit measurement, transfuse if indicated
E. Consider CXR to evaluate for infiltrates or opacification of lung fields.
F. Check chart for recent platelet count or coagulation studies, if available

REQUIRED DOCUMENTATION
i. Peep change
ii. Total fluid resuscitation needed
iii. Dose of epinephrine given and number of doses administered
iv. End tidal Capnography if ventilated
v. CXR results, if obtained.
REFERENCES/CITATIONS