

## A Potpourri of Neonatal Procedures

### Objectives

- List potentially serious complications that can occur with malpositioned gastric tubes in neonates
- Outline the findings of the study presented regarding accuracy of the methods used to determine nasogastric tube insertion depth
- Recall key tips described for the procedures of intravenous cannulation, peripherally inserted central catheters, umbilical artery and vein catheterization, and elective endotracheal intubation
- Summarize the indications for transfusion of various blood components as an integral part of providing neonatal intensive care and include the potential risks and complications of such therapy

### Content Outline

1. Study Comparing Three Methods of Gastric Tube Length Measurement in Newborns
  - 1.1 Study design, description, and primary outcome
  - 1.2 Results, discussion, and conclusion
2. Tips for Performing Common Neonatal Procedures
  - 2.1 Vascular access
    - 2.1.1 Peripheral intravenous line (IV)
    - 2.1.2 Peripherally inserted central catheter (PICC)
    - 2.1.3 Umbilical artery (UAC) and vein (UVC) catheter insertion
  - 2.2 Airway
    - 2.2.1 Elective endotracheal intubation
3. Transfusions in the Neonate
  - 3.1 Red blood cell (RBC) transfusion
    - 3.1.1 Preparation, indications, risks, and complications
  - 3.2 Platelet transfusion
    - 3.2.1 Components, indications, risks, and complications
  - 3.3 Indications, procedures, and risks of exchange transfusion
  - 3.4 Approaches to reduce the need for RBC transfusion

### Reading Material Resources

**Module WB2614: A Potpourri of Neonatal Procedures** is based on the resources listed below. A copy of the resources is included with the module.

Comparison of 3 Methods for Measuring Gastric Tube Length in Newborns, A Randomized Clinical Trial, Manzo BF et al., *Advances in Neonatal Care* (2023), 23(3), E79-E86

NeoTips: getting started with common neonatal procedures, Malik Q et al., *Paediatrics And Child Health* (2023), 33(6), 163-173

Chapter 70 Neonatal Transfusion, Patel RM and Josephson CM in *Avery's Diseases of the Newborn, Eleventh Edition* (2024), Elsevier, 1025-1032.e3