

## **SUBGALEAL HEMATOMA IN NEWBORN (ASSESSMENT FOR)**

### **1.0 POLICY:**

- 1.1 Infants born by vacuum or forceps will be identified by Labour and Birth staff on transfer to Maternal Newborn Unit. All such infants are at risk for development of subgaleal hematoma.
- 1.2 All infants born by forceps or vacuum will have their head examined and measured at birth and q1h x 4 hours then q3h or prior to feeds until 12 hours of age for the presence of a fluctuant mass or an increase in the size of the mass, increased swelling or tension of the scalp after birth.
- 1.3 At the same times, the infant will be observed for signs of hypovolemia. Signs of hypovolemia are:
  - Pallor
  - Shocky appearance
  - Tachycardia
  - Tachypnea
  - Mottling of the skin
  - Poor perfusion as evidenced by slow capillary filling time (greater than 3 seconds)
- 1.4 The nurse will notify the doctor if:
  - The scalp swelling, tension or fluctuant mass size increases following delivery and/or
  - The head circumference increases by 1 cm or more and/or
  - The infant displays signs of hypovolemia

### **2.0 PURPOSE:**

- 2.1 To monitor newborns following a vacuum or forceps delivery due to increased risk for development of subgaleal (subaponeurotic) hemorrhage.

## **SUBGALEAL HEMATOMA IN NEWBORN (ASSESSMENT FOR) (continued)**

### **3.0 PROCEDURE**

3.1 The first head circumference should be done at birth and every hour x 4 hours then every 3 hours or prior to feeds until 12 hours of age if the infant is identified at risk for subgaleal hemorrhage. Document the first head circumference on the Resuscitation Record, Labour & Birth, Assessment Prior to Transfer.

3.2 Place the tape measure around the back of the infant's head, coming across the center of the forehead in the front, just above the eyebrows, and at the back, under the ears, and over the most prominent portion of the posterior head (the occiput).

3.3 Document measurement on the Newborn Nursing Admission.

### **4.0 INFORMATION:**

The scalp is called the galuim or the aponeurosis. During delivery by vacuum extraction (and sometimes forceps) blood vessels between the infant's scalp and skull may rupture causing a collection of blood between the scalp and the skull. This is known as subgaleal or subaponeurotic hemorrhage. An infant with subgaleal hemorrhage will usually present with a fluctuant scalp swelling that crosses the sutures lines. If the infant continues to bleed into the space, the collection of blood can be massive causing hypovolemic shock and possibly death.

### **5.0 REFERENCES:**

Davis, D., Neonatal subgaleal hemorrhage: diagnosis and management, CMAJ, May 15, 2001. 164(10).

Uchil, D., Arulkumaran, S. Neonatal Subgaleal Hemorrhage and Its Relationship to Delivery by Vacuum Extraction, Obstet Gynecol Surv., Vol 58(10), Oct. 2003. 687-693.

British Columbia Reproductive Care Program, Obstetric Guideline 14, Assisted Vaginal Birth: The Use of Forceps or Vacuum Extractor. Oct. 2001.

Women's Health Program, Health Services Center. Winnipeg. Vacuum Extraction, Care of Infant Following Delivery. Dec. 2003.