Vitamin K Deficiency Bleeding (I	Formerly Hemorrhagi	associated problems. c Disease of the N	ewborn)
Bleeding disorder resulting from transient deficiency of vitamin K-dependent blood factors; newborn's sterile gut does not produce adequate amounts of vitamin K	Oozing blood from umbilicus or circumcision Bloody or black stools Hematuria Petechiae	Administer prophylactic vitamin K.	Administer prophylactic vitamin K via intramuscular route. Observe for complications, such as bleeding umbilical cord, prolonged circumcision bleeding, and petechiae.

PPHN, Persistent pulmonary hypertension of the newborn; RBC, red blood cell.

## **Neurologic Complications**

Neurologic injury in newborn infants is common. Newborn infants are particularly vulnerable to ischemic injury caused by variable (both increased and decreased) cerebral blood flow subsequent to asphyxia; and preterm infants, with a fragile cerebrovascular network, are highly prone to periventricular or intraventricular hemorrhage. Fragility and increased permeability of capillaries and prolonged prothrombin time predispose preterm infants to trauma when delicate structures are subjected to the forces of labor. The more common neurologic complications are outlined in Table 8-10.

TABLE 8-10
Neurologic Complications

Description	Clinical Manifestations	Therapeutic Management	Nursing Care Management		
Hypoxic-Ischemic Brain Injury					
Nonprogressive neurologic (brain) impairment caused by intrauterine or postnatal asphyxia resulting in hypoxemia or cerebral ischemia Hypoxic-ischemic encephalopathy—the resultant cellular damage causes the clinical manifestations	Appears within first 6 to 12 hours after hypoxic episode Seizures Abnormal muscle tone (usually hypotonia) Disturbance of	Prevent hypoxia. Provide supportive care. Provide adequate ventilation. Maintain cerebral perfusion. Prevent cerebral	See Nursing Care of the High-Risk Newborn and Family earlier in the chapter. Observe for signs that indicate cerebral hypoxia. Monitor ventilatory and IV therapy. Observe for and manage seizures. Support family. Provide guidelines for family management of		