

Compression of the underlying brain produces effects that can be rapidly fatal or insidiously progressive.

### **Nursing Alert**

Suspect posttraumatic meningitis in children with increasing drowsiness and fever who also have basilar skull fractures.

### **Epidural Hemorrhage**

An epidural hemorrhage is a hemorrhage into the space between the dura and the skull. As the hematoma enlarges, the dura is stripped from the skull, forcing the underlying brain contents downward and inward as the brain expands (see [Fig. 27-6, A](#)). Because bleeding is generally arterial, brain compression occurs rapidly. Most often the expanding hematoma is located in the parietal and temporal regions ([Teichert, Rosales, Lopes, et al, 2012](#)). The lower incidence of epidural hematoma in childhood has been attributed to the fact that the middle meningeal artery is not embedded in the bone surface of the skull until approximately 2 years old. Therefore, a fracture of the temporal bone is less likely to lacerate the artery.

The classic clinical picture of epidural hemorrhage is a lucid interval (momentary unconsciousness followed by a normal period and then lethargy or coma) due to blood accumulation in the epidural space and compression of the brain (see [Box 27-3](#) for clinical manifestations). The period of impaired consciousness is frequently lacking, and common symptoms in a child with no neurologic deficit are irritability, headache, and vomiting. In infants younger than 1 year old the most common symptoms are irritability, pallor with anemia, and cephalhematoma. Infants may also have hypotonia, seizures, a bulging anterior fontanel, and lethargy. An epidural hematoma can be detected by a CT scan. If the severity of the child's signs and symptoms is not recognized, herniation and death will occur.

### **Box 27-3**

### **Clinical Manifestations of Acute Head Injury**