

child. Many of these tests require the child to lie absolutely motionless for a prolonged time in a confined space with little or no communication with a supportive adult. Consequently, infants and young children are usually sedated, and older children need an explanation of what to expect and reminders during the test of how much longer they must remain still. The same principles for preparing children for procedures that are discussed in [Chapter 20](#) apply here, including the option of having parents stay with the child whenever possible. Children who undergo repeated tests need additional preparation and emotional support to decrease their stress.

Two procedures, bone marrow studies and LPs, are so commonly performed in many types of childhood cancer that they deserve special consideration in preparing children ([Fig. 25-2](#)). Professionals caring for children with cancer recommend the use of developmentally appropriate support using both pharmacologic and nonpharmacologic approaches and sedation if required (see [Chapter 5](#)).



FIG 25-2 Child with leukemia undergoing bone marrow aspiration.

Topical anesthetics such as eutectic mixture of local anesthetics (EMLA) and LMX4 creams are used as a local anesthetic before intrusive procedures, including venipunctures, implanted port access, LPs, and subcutaneous or intramuscular injections