- Paper or nonallergenic tape to mark the tube and to attach the tube to the infant's or child's cheek (and nose if placed through the nares)
- pH paper to determine the correct placement in the stomach
- The solution for feeding

Not all feeding tubes are the same. Polyethylene and polyvinylchloride types lose their flexibility and need to be replaced frequently, usually every 3 or 4 days. Polyurethane and silicone tubes remain flexible, so they can remain in place up to 30 days. Advantages of small-bore tubes include a reduced incidence of pharyngitis, otitis media, aspiration, and discomfort. Disadvantages include difficulty during insertion (may require a stylet or metal guide wire), collapse of the tube during aspiration of gastric contents to test for correct placement, dislodgment during forceful coughing, migration out of position, knotting, occlusion, and unsuitability for thick feedings.

Procedure

Infants are easier to control if they are first wrapped in a mummy restraint (see Fig. 20-4, *A*). Even tiny infants with random movements can grasp and dislodge the tube. Preterm infants do not ordinarily require restraint, but if they do, a small blanket folded across the chest and secured beneath the shoulders is usually sufficient. Be careful so that breathing is not compromised.

Whenever possible, the infant should be held and provided with a means for nonnutritive sucking during the procedure to associate the comfort of physical contact with the feeding. When this is not possible, gavage feeding is carried out with the infant or child on the back or toward the right side and the head and chest elevated. Feeding the child in a sitting position helps maintain placement of the tube in the lowest position, thus increasing the likelihood of correct placement in the stomach.

Although the most accurate method for testing tube placement is radiography, this practice is not always possible before each feeding. Research indicates that bedside assessment of gastrointestinal aspirate color and pH is useful in predicting feeding tube placement (see Translating Evidence into Practice box). If doubt exists regarding correct placement, consult the