



FIG 8-9 **A**, Preterm infant slowly transitioned to the prone position on a prone roll. **B**, Preterm infant positioned on a prone roll. (Courtesy of Halbouty Premature Nursery, Texas Children's Hospital, Houston, TX; photos by Paul Vincent Kuntz.)

Skin Care

The skin of preterm infants is characteristically immature relative to that of full-term infants. In most preterm infants, the skin barrier properties resemble those of the term infant by 2 to 4 weeks' postnatal age, regardless of gestational age at birth. Because of its increased sensitivity and fragility, alkaline-based soap that might destroy the skin's **acid mantle** is avoided. The increased permeability of the skin facilitates absorption of ingredients. All skin products (e.g., alcohol, chlorhexidine, povidone iodine) should be used with caution; the skin is rinsed with water afterward because these substances may cause severe irritation and chemical burns in VLBW and ELBW infants.

The skin is easily excoriated and denuded; therefore, care must be taken to avoid damage to the delicate structure. The total skin is thinner than that of full-term infants and lacks **rete pegs**, appendages that anchor the epidermis to the dermis. Therefore, there is less cohesion between the thinner skin layers. The use of adhesive tape or bandages may excoriate the skin or adhere to the skin surface so well that the epidermis can be separated from the dermis and pulled away with the tape. The use of pectin barriers and hydrocolloid adhesives may be useful, because these products mold well to skin contours and adhere in moist conditions.