Committee on Fetus and Newborn

# Skin Care of Newborns

The recent concern related to bathing newborns with hexachlorophene has led to a redefinition of appropriate skin care for newly born infants in hospital nurseries. Skin manipulations are performed (1) for prevention of infection and (2) for aesthetic and cleansing purposes.

The skin is a protective organ and any break in its integrity affords an opportunity for initiation of infection. In addition, it is clear that protection against invading pathogenic organisms is afforded by skin secretions or contents and the normal skin biota.

Therefore, skin care should involve cleansing with a non-toxic, non-abrasive neutral material.

Consideration of skin care of the newborn is further complicated by the fact that the infant does not have protective skin flora at birth, has at least one and possibly two open surgical wounds, the umbilicus and circumcision site, and is exposed to fomites and personnel that harbor a variety of infectious agents.

Risks and benefits of each skin-care technique in the newly born must be weighed. Is the agent used absorbed and toxic directly or indirectly? What is the effect of the technique on the skin itself? Does the agent predispose to a biota change that is detrimental to the infant?

The currently available data suggest that perhaps the best method for managing infant skin is to minimize manipulation. The recommended technique is referred to as dry skin care. "Dry technique" is recommended for the following reasons: (1) it subjects the infant to less heat loss by exposure; (2) it diminishes skin trauma; (3) it requires less time, and (4) it does not expose the infant to agents with known or unknown side effects.

Skin care should consist of the following points:

- (1) Cleansing of the newly born infant should be delayed until the infant's temperature has stabilized after the cold stress of delivery.
- (2) Cotton sponges (not gauze) soaked with sterile water are used to remove blood from the face and head and meconium from the perianal area. As an alternative, a mild nonmedicated soap can be used with careful water rinsing. Potential bacterial contamination of bar or liquid soaps should be remembered.
- (3) The remainder of the skin should be untouched unless grossly soiled. There is evidence to indicate that vernix caseosa may serve a protective function, some evidence to indicate it has no effect, and no evidence to indicate it is harmful.
- (4) For the remainder of the infant's stay in the hospital nursery, the buttocks and perianal regions should be cleansed with sterile water and cotton. As an alternative, a mild soap with water rinsing may be used as required at diaper changes and more often if indicated.
- (5) There is no single method of cord care which has been proven to limit colonization and disease. Several methods currently in use include local application of alcohol, triple dye,\* and antimicrobial agents.

During nursery outreaks of infection, a total program of infection control is indicated. This should include institution of a program of surveillance and epidemiologic investigation, possible tracking changes, and institution of cohorts. Since hand transmission is the primary means of acquisi-

<sup>\*</sup>Triple dye is composed of 2.29 gm of brilliant green, 1.14 gm of proflavine hemisulfate, 2.29 gm of crystal violet, and enough water to make 1,000 ml.

tion of most organisms by newly born infants, emphasis must be placed on hand washing techniques as recommended in Standards of Recommendations of Hospital Care of Newborn Infants.

In the case of staphylococcal outbreaks, several measures may be undertaken. These might include: treatment of the cord or the cord and nose with an antibiotic ointment, treatment of the cord with triple dye, or even brief institution of a program of total body bathing with a solution of not more than 3% hexachlorophene. (This application must be limited to full-term infants, must be thoroughly washed off after the application, and applied no more than two times to each infant.) In serious outbreaks the technique of bacterial interference or the administration of systemic antibiotics to all infants may be required.

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Noted by T. E. C., Jr., M.D.

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