Clinical Picture

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MACULAR ERYTHEMA developed on one half of the body of a full-term newborn with transient tachypnea on the third day of life (**Figure 1**). The color change lasted 10 minutes and was not associated with changes in vital signs. A similar change in body color developed in an otherwise healthy premature infant on the fifth postnatal day (**Figure 2**).

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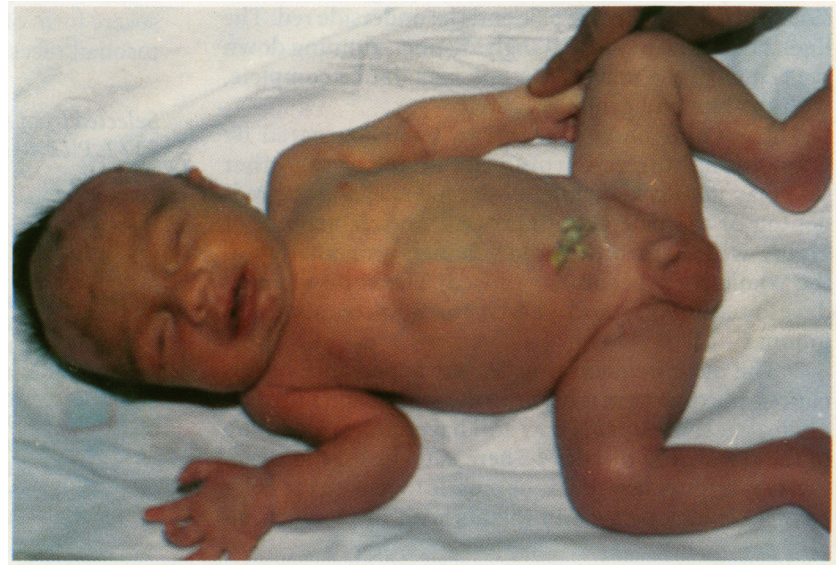

Figure 1.

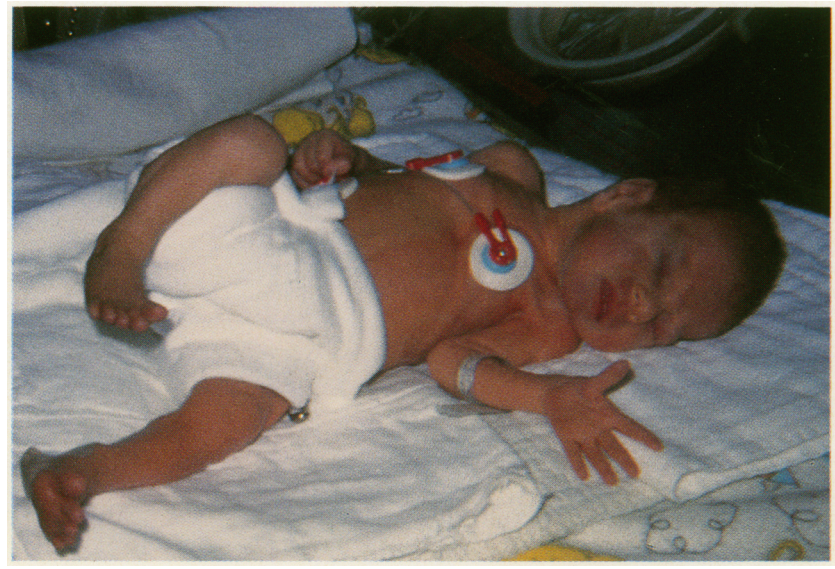

Figure 2.

Denouement and Discussion

Harlequin Color Change

Figure 1. *One half of the body is erythematous, with a sharp line of demarcation down the center of the torso.*

Figure 2. *The dependent half of the body is erythematous, with a sharp line of demarcation.*

The harlequin color change was first described by Neligan and Strang in 1952.[1] Premature infants are more commonly affected than full-term infants, but up to 10% of full-term infants may display this phenomenon, most commonly on the third or fourth days of life.[2,3] The characteristic appearance is a macular erythema involving one half of the infant's body, with simultaneous blanching of the other half. This most commonly occurs when the infant is lying on his or her side, with the upper side pale and the underside red. The line of demarcation is strikingly distinct, running down the center of the infant. The line may not be complete, with the face and genitalia spared.

The color change seems to be accentuated by gravitational force. Turning the infant to the other side may induce blanching of the red side and the reddening of the pale side. Increased muscle activity or crying will disturb the color change immediately as the whole body becomes suffused. The color changes develop suddenly and persist for 30 seconds to 20 minutes.

The most frequent time for the appearance of this curious phenomenon is between the second and fifth days of life, but some infants may still have such episodes up to the third week of life.[1,4] There is no change in respiratory rate, pupillary reflex, or muscle tone with the color change. It may be seen in infants with intracranial injury as well as in infants who appear to be perfectly healthy.

PATHOGENESIS

This condition is believed to be related to the immaturity of the hypothalamic center that controls the tone of peripheral blood vessels. No treatment is required, since the condition is believed to be completely benign. The change no longer occurs after the third week of life.

DIFFERENTIAL DIAGNOSIS

Harlequin color change should be differentiated from cyanosis. It should not be confused with harlequin fetus, a severe form of congenital ichthyosis, inherited as an autosomal recessive trait.

Selected from Arch Pediatr Adolesc Med. *1995;149:1171-1172. Picture of the Month.*

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