

CLINICAL IMAGES

Harlequin colour change: unilateral erythema in a newborn

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A healthy girl was born at term after an uncomplicated pregnancy and delivery. When she was five days old, unilateral erythema with contralateral pallor developed that was strikingly demarcated at midline (Figure 1). This phenomenon occurred after the infant had been placed on her right side, with the erythema on the dependent half of her body. It resolved spontaneously within minutes.

Harlequin colour change appears transiently in approximately 10% of healthy newborns.¹ This distinctive phenomenon presents as a well-demarcated colour change, with one half of the body displaying erythema and the other half pallor. Usually occurring between two and five days of age, harlequin colour change has been seen as late as three weeks of age.² The condition is benign, and the change of colour fades away in 30 seconds to 20 minutes. It may recur when the infant is placed on her or his side. The differential diagnosis includes port-wine stain and nascent hemangioma of infancy.³ The transient nature of harlequin colour change helps to differentiate it from these other conditions.

Although occasionally reported with prematurity, low birthweight, hypoxia, systemic use of prostaglandin E1, or intracranial injury,² harlequin colour change is seen most often in healthy neonates. Some authors have speculated that its pathogenesis involves temporary imbalance in the tone of cutaneous blood vessels secondary to hypothalamic immaturity.⁴ This benign condition should not be confused with harlequin fetus, a severe and uncommon form of ichthyosis manifesting with large, plate-like scales and fissures over the body.

Recognition of harlequin colour change is important, given that parents may be quite alarmed at its striking cutaneous changes. The phenomenon is likely more common than suggested by the literature, in part because of its transience.

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Figure 1: Well-demarcated erythema on the dependent right side (harlequin colour change) of a healthy five-day-old girl.

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