

SPOT DIAGNOSIS (IMAGE GALLERY)



COLOR CHANGE

Sunil Kumar B M, Shruthi Patil, Sathish Kumar K M and Rau A T K

Department of Pediatrics, M S Ramaiah Medical College, Bangalore, India.

Address for Correspondence: Dr Sunil Kumar B M, Associate Professor, Department of Pediatrics, M. S. Ramaiah Medical College, Bangalore- 560054, India. E-mail: sunilminajagi@yahoo.com

A full term normal female new born without any antenatal, intranatal and postnatal issues, on day 3 of life was noticed to have developed unilateral erythema with contralateral pallor with a striking demarcation at

midline (Figure 1). This un-equality of skin color was noticed after the baby was put on left side with dependent side becoming erythematous. This phenomenon lasted for 20 minutes and resolved spontaneously without any other symptoms.

What is the diagnosis?

Harlequin Color Change. It was first described by Neligan and Strang in 1952. It is defined as a transient erythema involving one half of the infant's body with simultaneous blanching of the other side with a demarcation on the midline. It is an unusual vascular phenomenon seen transiently in approximately 10 percent of healthy newborns. (1) It occurs when the newborn is placed on one side, an erythematous color change occurs on the dependent site while the upper side becomes pale and there is a pronounced demarcation line between them. The exact mechanism of this phenomenon is not known, but is thought to be due to immaturity of the hypothalamic center that controls dilation of peripheral blood vessels. (2) The Harlequin color change usually occurs on the 2nd to 5th day of life, sometimes it can be seen up to 21 days of life. (3) It resolves with crying or movement and is believed to be benign. The head and genitalia are usually spared. If the color change is persistent, a large capillary malformation may be suspected. The differential diagnosis includes port-wine stain and nascent hemangioma of infancy. (4) It does not require any treatment.

References

1. Selimoglu MA, Dilmen U, Karakelleoglu C, Bitlisli H, Tunnessen WW Jr. Picture of the month. Harlequin color change. Arch Pediatr Adolesc Med. 1995; 149:1171-1172
2. Padda GS, Cruz OA, Silen ML, Krock JL. Skin conductance responses in paediatric Harlequin syndrome. Paediatr Anaesth 1999; 9:159-162
3. Rao J, Campbell ME, Krol A. The harlequin color change and association with prostaglandin E1. Pediatr Dermatol. 2004; 21:573-576
4. Cordoro KM, Speetzen LS, Koerper MA, Frieden IJ. Physiologic changes in vascular birthmarks during early infancy: mechanisms and clinical implications. J Am Acad Dermatol. 2009; 60: 669-675.

E-published: January 2012. **Art#6, DOI No. :** 10.7199/ped.oncall.2012.6