

5. Bakos RM, Cartell A, Bakos L. Dermoscopy of early-onset necrobiosis lipidica. *J Am Acad Dermatol.* 2012;66:143–4.
6. Vazquez-Lopez V, Kreusch J, Marghoob AA. Dermoscopic semiology: further insights into vascular features by screening a large spectrum of nontumoral skin lesions. *Br J Dermatol.* 2004;150:226–31.
7. Brasiello M, Zalaudek I, Ferrara G, Gourhant JY, Capoluongo P, Roma P, et al. Lupus vulgaris: a new look at an old symptom—the lupoma observed with dermoscopy. *Dermatology.* 2009;218:172–4.
8. Pellicano R, Todorovic-Zivkovic D, Gourhant JY, Catricala C, Ferrara G, Caldarola G, et al. Dermoscopy of cutaneous sarcoidosis. *Dermatology.* 2010;221:51–4.

E. Conde-Montero,^{a,*} J.A. Avilés-Izquierdo,^a
M.D. Mendoza-Cembranos,^a V. Parra-Blanco^b

^a *Servicio de Dermatología, Hospital Universitario Gregorio Marañón, Madrid, Spain*

^b *Servicio de Anatomía Patología, Hospital Universitario Gregorio Marañón, Madrid, Spain*

*Corresponding Author.

E-mail address: Elenacondemontero@gmail.com
(E. Conde-Montero).

Transient Pigmentary Lines of the Newborn[☆]

Líneas pigmentarias transitorias del recién nacido

To the Editor:

The skin of newborn babies plays a fundamental role in the transition at birth from an aqueous to a predominantly dry environment. Newborn skin is characterized by a relatively thin stratum corneum, the absence of dermal ridges and well-developed collagen fibrils within the papillary dermis, a composition distinct from that of subcutaneous fat, and an immature cutaneous vascular system.¹

Due to the immaturity of the cutaneous components a series of specific cutaneous reactions occurs during the first few weeks of life, giving rise to a condition known as transient benign cutaneous lesions of the newborn. It is important to recognize these reactions and not to confuse them with infections or signs of internal or genetic diseases in order to avoid alarming parents and performing unnecessary tests and treatments.^{1,2}

This letter describes the case of a 1-month-old infant who presented hyperpigmented lesions that followed the skin folds of the abdomen, consistent with a diagnosis of transient pigmentary lines of the newborn.

The patient was a 1-month-old male infant who had been referred for assessment of abnormal pigmentation of the abdomen that had been present since birth. He had been born by unassisted vaginal delivery at 39 weeks of gestational age, and had no congenital abnormalities. No physiological scaling or other transient cutaneous lesions were observed in the first days of life, and there was no family history of similar cutaneous lesions.

Physical examination revealed 4 horizontal hyperpigmented lines that followed the skin folds of the abdomen. Apart from hyperpigmentation of the navel, no other lesions were observed (Fig. 1). The infant's growth and development were normal.

A diagnosis of transient pigmentary lines was established and the parents were informed of the transient nature of the condition. In the following 4 months, without treatment, the linear hyperpigmentation gradually faded and disappeared, and normal skin color was restored.

Transient pigmentary lines were first described by Gibbs in 1967.³ This rare condition, one of several forms of transient benign cutaneous lesions that affect newborns,¹ is referred to in the literature by several terms, including striped hyperpigmentation of the torso,^{3,4} pigmentary lines of the newborn,^{5,6} and transient infantile patterned hyperpigmentation.⁸ By searching the PubMed database using the search terms *pigmentary lines*, *pigmentary transient*, *striped hyperpigmentation*, and *transient hyperpigmentation* we found only 7 other cases consistent with this entity (Table 1).^{3,5–8} The condition is characterized by the appearance at birth of several horizontal bands of hyperpigmentation that follow the skin folds of the abdomen, back, or limbs. These bands subsequently fade spontaneously and resolve fully by 2 to 8 months of age. They most commonly affect black or dark-skinned male neonates, and are rare in white infants. Transient pigmentary lines can be associated with abnormal cornification (ichthyosis vulgaris and collodion baby)^{3,4} and pigmentation (vertical linear hypopigmentation of the abdomen,⁵ hyperpigmentation along the spine,⁷ and mottled hyperpigmentation of the



Figure 1 Linear hyperpigmentation in the skin folds of the abdomen and diffuse hyperpigmentation of the navel.

[☆] Please cite this article as: Monteagudo B, et al. Líneas pigmentarias transitorias del recién nacido. *Actas Dermosifiliogr.* 2013;104:537–9.

Table 1 Main Characteristics of Cases of Transient Pigmentary Lines of the Newborn Described in the Literature.

Source	Country	Sex/Age of Newborn	Racial Group	Location of Transient Pigmentary Lines	Other Skin Lesions	Extracutaneous Anomalies	Evolution of Transient Pigmentary Lines
Gibbs, ³ 1967	United States	M/NA	Black	Abdomen	Collodion baby Ichthyosis vulgaris	Umbilical hernia	Resolved at 4 mo of age
Halper et al., ⁵ 1993	United States	M/6 wk	Black	Back Flank Arms	No	No	Resolved at 4–6 mo of age
		M/2 mo	Black	Abdomen	Vertical linear hypopigmentation of the abdomen	No	Resolved at 6 mo of age
Prigent et al., ⁶ 2000	France	M/at birth	Black	Back	No	No	NF
		M/3 wk	Black	Arms	No	No	Resolved at 2–3 mo of age
Martín et al., ⁷ 2009	Spain	F/2 wk	White	Abdomen Back	Hyperpigmentation along the spine Scattered hyperpigmented macules on the back	No	Cleared in 6 mo
Garg et al., ⁸ 2012	India	M/2 wk	NA	Abdomen Arms	No	No	Cleared in 3–6 mo
Monteagudo et al., ^a 2012	Spain	M/1 mo	White	Abdomen	Hyperpigmentation of the navel	No	Cleared in 4 mo

Abbreviations: F, female; M, male; NA, not available; NF, no follow up.

^a Present case.

back⁷). No associated extracutaneous anomalies have been described. The etiology and pathogenesis of transient pigmentary lines are unclear; its origin is not thought to be hormonal, but rather a consequence of friction or impaired exfoliation of the embryonic skin, accentuated by the flexed position of the fetus (mechanical trauma associated with hyperkeratosis within the skin folds).³

Newborns and infants can be affected by multiple processes that involve altered pigmentation.^{9,10} The differential diagnosis of transient pigmentary lines includes hyperpigmentation secondary to congenital adrenal hyperplasia, possibly caused by cross reactivity of adrenocorticotropic hormone with melanocyte-stimulating hormone (MSH) receptors.¹ It should also be distinguished from transient hyperpigmentation which is present in approximately 15% of newborns (particularly dark-skinned males), affects the middle and lower abdomen (black line), the area around the areolas, the axillae, the periungual region, and the genital area (the scrotum in males and the labia and vulva in females), and has been associated by some authors with stimulation in utero by MSH.^{1,9}

In summary, we have presented a new case of transient pigmentary lines in the skin folds of the abdomen in a white infant; this entity has been rarely described in reports or in medical journals and is possibly underdiagnosed, but familiarity with this condition is fundamental for routine dermatologic practice.

References

1. Lucky AW. Transient benign cutaneous lesions in the newborn. In: Eichenfield LF, Frieden IJ, Esterly NB, editors. *Neonatal Dermatology*. 2nd ed. Philadelphia: Saunders Elsevier; 2008. p. 85–98.
2. Monteagudo B, Labandeira J, León-Muiños E, Carballeira I, Corrales A, Cabanillas M, et al. Prevalencia de marcas de nacimiento y lesiones cutáneas transitorias en 1.000 recién nacidos españoles. *Actas Dermosifiliogr*. 2011;102:264–9.
3. Gibbs RC. Unusual striped hyperpigmentation of the torso. A sequel of abnormalities of epitrichial exfoliation. *Arch Dermatol*. 1967;95:385–6.
4. Bonifazi E, Cutrone M. Neonatal striped hyperpigmentation of the torso secondary to split lines of the horny layer at birth. *Eur J Pediatr Dermatol*. 2011;21:184–5.
5. Halper S, Rubenstein D, Prose N, Levy ML. Pigmentary lines of the newborn. *J Am Acad Dermatol*. 1993;28:893–4.
6. Prigent F, Aufrant C, Bompard Y. Pigmentation linéaire du nouveau-né. *Arch Pediatr*. 2000;7:1316–7.
7. Martín JM, Jordá E, Alonso V. Transient pigmentary lines of the newborn. *Pediatr Dermatol*. 2009;26:768.
8. Garg G, Bhalla M, Thami GP. Transient infantile patterned hyperpigmentation. *Pediatr Dermatol*. 2012;29:372–3.
9. Taïeb A, Boralevi F. Hypermelanoses of the newborn and of the infant. *Dermatol Clin*. 2007;25:327–36.
10. Gibbs NF, Makkar HS. Disorders of hyperpigmentation and melanocytes. In: Eichenfield LF, Frieden IJ, Esterly NB, editors. *Neonatal Dermatology*. 2nd ed. Philadelphia: Saunders Elsevier; 2008. p. 397–422.

B. Monteagudo,^{a,*} E. León-Muiños,^b Ó. Suárez-Amor,^a J. Labandeira^c

^a *Servicio de Dermatología, Hospital Arquitecto Marcide, Área Sanitaria de Ferrol, SERGAS, Ferrol, A Coruña, Spain*

^b *Pediatría, Centro de Salud de San Sadurniño, Área Sanitaria de Ferrol, SERGAS, San Sadurniño, A Coruña, Spain*

^c *Servicio de Dermatología, Complejo Hospitalario Universitario de Santiago de Compostela, SERGAS, Santiago de Compostela, A Coruña, Spain*

*Corresponding Author.

E-mail address: benigno.monteagudo.sanchez@sergas.es (B. Monteagudo).