



Transient Pigmentary Lines in Down's Syndrome

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Abstract

Transient Pigmentary lines in neonates is a well- known entity that subsides few months needing only reassurance and close monitoring and follow up. We present this case of a newborn with Downs Syndrome with transient pigmentary lines – a previously un reported occurrence.

Keywords: *Transient pigmentary lines, Downs Syndrome, newborns, cutaneous lesions.*

Introduction

Transient pigmentary lines of the newborn is a exceedingly rare benign entity with less than 10 case reports. The lines appear at birth or soon after in the neonatal or early infancy and spontaneously disappear with 2 to 8 months, only treatment needed being follow up and reassurance.

Case Report

A two and a half months old boy with mongoloid features was admitted with acute lower respiratory tract infection.

Of special interest and importance was the findings on dermatological examination. The infant had multiple dark linear pigmentary lines over the anterior abdomen.

He was born to a primi mother aged 20 years delivered by labor naturalis at 38 weeks at a government hospital with a birth weight of 2.5 kg. Postnatal period was uneventful.

Head to toe examination revealed features of downs syndrome such as wide open anterior

fontanelle, open posterior fontanelle, mongoloid facies, low set ears, hypertelorism, mongoloid slant, low set ears, clinodactyly, single palmar crease, saddle gap. Genetic Investigations confirmed down's syndrome - trisomy 47, XY+21. Infant also had normal thyroid function tests, normal echocardiogram.

Treatment was reassurance and follow up. It resolved spontaneously in three months.



Fig 1: Pigmentary lines in chest and abdomen

Discussion

Transient pigmentary lines of the newborn, though exceedingly rare with less than 10 reported cases in literature, is a benign condition that resolves without intervention.

Though pigment lines in the newborn were reported in 1913 by Matsumoto and 25 years later rediscovered by American Futcher, it is in 1967 Gibbs first described the entity transient pigmentary lines of the newborn and postulated that they were the result of in utero irritation of flexed areas. (fosse),⁵

Of the published 8 cases so far, 5 were in black children and 2 were in white children: the ethnicity of one infant was not identified.⁷ 7 of the 8 cases were in boys; the one girl was white.^{3,6}

The color and pigmentation of skin may manifest great diversity in the entire human race and differs in even with same ethnicity due to variations in distribution, number and size of melanosomes. Normalcy of dermal color is influenced by melanin, carotene, hemoglobin and its oxygenation, epidermal thickness and vascularity. Variation in Pigmentation may be hypo or hyper, congenital or acquired, local or diffuse, static or progressive and transient, recurrent or permanent. (fosse)

There are various pigmentary disorders that can appear in otherwise healthy newborns. Transient Pigmentary lines of the newborn are classified under transient benign cutaneous lesions.¹

Transient hyperpigmentation in darkly pigmented skin types may be physiological. The hyperpigmentation is localized usually to the lower abdomen (lineanigra), genitals (vulva and scrotum), axillae, periungual and periareolar regions. Intra uterine melanocyte stimulating hormone activity is a possible explanation but the exact mechanism still remains unclear.^{3,7}

In all the cases, the hyperpigmented lines resolved spontaneously within 2 to 8 months.^{3,6}

Conclusion

This case report is presented because of its rarity and its first case report to get published from south India.

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