A Typical Case of Large Congenital Dermal Melanocytosis

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Abstract
Nevus are type of skin pigmentation also called “Birth marks” present at birth, the color, shape, size, type, location and clinical significance varies from infant to infant. Majority of the Nevus are benign in nature but some may have immediate and late structural abnormalities including cancerous changes. They have to be identified and monitored for not only cosmetic purposes also their clinical course. We report a healthy newborn infant presented with large Nevus on right upper limb which is similar in color, but different location of a dermal Melanocytosis which is also commonly called “Mongolian spots”. The condition, though benign, but cosmetically disfigured. Parents have to be counseled for close follow-up.

Introduction
Birth marks over the skin of newborns at birth are common and carries concerns for the parents. The pigmented birth marks usually are called congenital nevi and occur in a large number of newborn cases. They vary in color, size and localization. We report a newborn with an unusual presentation of extensive birth mark over the whole parts of the right upper limb and over sacro-gluteal area.

Case Presentation
We observed a male infant, born of a monitored pregnancy without complications or abnormalities during the prenatal visits. The infant was born to a 28 years old mother G2P2000. The parents were African-American in healthy condition with no history of consanguinity. During pregnancy the mother tested positive for marijuana and had recurrent urinary tract infections throughout the pregnancy treated appropriately with antibiotics. The delivery was by C-section at 39 weeks with rupture of membranes at the time of delivery. The infant had Apgar score of 9 and 9 at the first and fifth minute respectively. The birth weight was 3,680 grams and the anthropometric measures were head circumference 36.5 cm, chest circumference 36 cm, abdominal circumference 34 cm and length 52 cm. The physical exam remarkable for caput succedaneum over the parieto-occipital region and extensive bluish colored patches over the entire right upper extremity (Figure 1A and B) and over the sacral region (Figure 2).

The course in the newborn nursery was uneventful. Urine toxicology test was negative and the patient was exclusively breastfeeding. The patient was discharged on the third day without complication and the bilirubin level on the low risk as per Bhutani nomogram. The mother was reassured as this is a benign condition and it may fade away over a period of time, but need a close follow up.

The patient attended the newborn visit 18 days after the discharge, with no complaints, the physical exam unremarkable and the dermal pigmentation remained unchanged with no new pigmented areas. The newborn screening test for inborn error of metabolism was negative.

Discussion
Congenital dermal melanocytosis also known as Mongolian spots, are benign, congenital, single or multiple bluish, greyish slate, flat areas that usually affect healthy newborns and generally disappear during childhood [1]. There are marked ethnic differences in prevalence with 85% to 100% in Asian neonates, 60% in African-American neonates, 46% to 70% in Hispanic neonates and less than 10% in white neonates. It seems that both sexes are affected, with a slightly higher prevalence in boys [2,3].

Congenital dermal melanocytosis typically appears as a blue-grey pigmented flat area with indefinite borders, although it also can be greenish-blue or brown. The diameter of the lesion may be 10 cm or more. The most common location is the sacral-gluteal region, followed by the
shoulders. They rarely occur on the head, face, or flexor surface of the extremities. In our case it is seen on the upper extremity in addition to the sacral-gluteal with the same color. It is completely benign and usually fades during the first or second year of life. By 6 to 10 years of age, the majority disappears. However, approximately 3% remain into adulthood, particularly those in extra sacral locations [2].

Histological it is believed to be characterized by spindle-shaped melanocytes within the dermis; they are thought to be the result of the failure of melanocytes to correctly migrate from the neural crest to the developing epidermis [3]. We did not have histopathology work up since it was a benign condition.

Dermal-melanocytes spots must be differentiated from other dermal melanocytosis like nevus of Ota, nevus of Ito, Hori nevus, nevus spilus and blue nevus. These must be differentiated clinically based on their onset, distribution and evolution [3-5]. In extreme situation if this condition persist it must be differentiated from nevus which are located in the central line defect, associate with syndromes and some inborn error of metabolism which require work up and follow up.

**Conclusion**

As physicians we need to document these pigmented lesions on the initial physical exam due to the different presentation in size, color and localization of the congenital dermal melanocytosis. It also gives us background to compare if a patient presents with other kind of pigmented lesions as they grow up. Proper counseling and follow up will decrease the fear of the parents and tend to create a better understanding. The overall prognosis is good and for cosmetic purposes the area can be covered with a full sleeve shirt until its resolution.

**References**