



COMMON BIRTH MARKS; TO IDENTIFY THE FREQUENCY IN INFANTS PRESENTING TO OUT PATIENT OF TERTIARY CARE HOSPITAL

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ABSTRACT...Objectives: To identify the frequency of common birthmarks presenting in outpatients department of dermatology until and to increase awareness among doctor about the common phenomena. **Patients and Study Design:** A cross sectional study. **Setting:** OPD of Dermatology department of Dow University Hospital. **Period:** January 2014 till October 2014. **Methods:** During a year, by using non-probability convenient sampling only 100 patients of both genders were enrolled in the study after ensuring inclusion, exclusion criteria. Complete history was recorded and a thorough general physical and cutaneous examination was performed. Information was collected on predesigned questionnaire after taking informed consent. Data Analysis was carried out on SPSS statistics software. **Results:** Out of 100 patients, 43% were males and 57% were females. In 69.6% patients, the birthmarks were noticed around time of delivery, 28.3% patients were noticed within 1st year of life and 2.2% later in 5 year. Pigmented birthmarks were identified in 65.2% patients while 34.8 % have vascular birthmarks. 71.1% had no changes in color during life span. While 37.8% had 1-3 cms birthmark and 45.7% have reported an increase in birthmark. **Conclusions:** We found birthmarks benign; they may grow with age but they do not need treatment unless there is concern either cosmetically or they have pain and discharge.

Key words: Melanocytic nevi, Salmon patches, Portwine stains, Cafe-au-lait macules, Mongolian spots, Sebaceous nevi, Congenital melanocytic nevi.

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INTRODUCTION

Birthmarks are usually evident at birth or thereafter. Mainly birthmarks were divided in two categories, vascular birthmarks; (often red, pink, purple) caused by abnormal blood vessels in or under skin.¹Pigmented birthmarks; (usually brown) caused by pigment cells, further divided into epidermal nevus and melanocytic nevi. It appears on all neonates almost with appearing on minor to major circumference of skin.²Due to their benign nature of skinits not practiced routinely to consult dermatologist.³As the thickness of infants skin is 40% to 60% of adult skin which predicts the weaker intercellular attachments. Therefore it is important for physician as well as for parents to understand the innocent transient skin lesions in infants and differentiate these birthmarks from serious conditions to only pigmented lesions like Mongolian spots(always disappear with time).⁴The objective of this study was to screen

the important pattern of birthmarks in Pakistan and to increase awareness among doctors about this common occurrence. However studies are very limited in our country. Hence it has been planned to highlight the prevalence of birthmarks in our setup.

PATIENTS AND METHODOLOGY

This cross sectional study was conducted in the Dermatology out patients department (OPD) of Dow University Hospital affiliated with Dow University of Health Sciences - Karachi, a tertiary care hospital from January –October 2014. Initially 123 patients were identified with birthmarks and interviewed and but only 100 were eligible to enroll in the study. Questionnaire was filled in an OPD of dermatology department after informed consent during 10 months. Physical examination was performed by dermatologist. Data collection included demographic variables as well as gender,

type of birth, site and size of birthmark, color and pain bleeding etc. The result was analyzed on Statistical Software SPSS Version 17. Categorical variables like gender, type and size of birthmarks in the form of frequency and percentage.

Results

Out of 100 patients, 43% were males and 57% were females. In 69.6% patients, the birthmarks were noticed upon or soon after delivery, 28.3% patients were noticed within 1st year of life and 2.2% later in 5 year.

Pigmented birthmarks are more common in 65.2% patients, vascular birthmarks in 26.1% and 8.7% patients having both. Out of patients having pigmented birthmarks, 40% were epidermal nevi and 60% were melanocytic nevi. 4.2% had Salmon patches (stork mark), 4.3% had Portwine stains, 17.4% had Infantile hemangiomas, 13.0% had Epidermal nevi, 2.2% had Sebaceous nevi, 8.7% had Congenital melanocytic nevi, 15.2% had Mongolian spots, 4.3% had Nevi of ota, 2.2% had Nevi of ita, 17.4% had Café-au-lait macules, 4.3% had multiple birthmarks 1 (Salmon patches, Mongolian spots, Cafe-au-lait macules), 4.3% had multiple birthmarks 2 (Epidermal nevi, Mongolian spots), and, 2.2% had multiple birthmarks 3 (Congenital melanocytic nevi, Mongolian spots, Nevi of oti).

Vascular birthmarks were noticed in 50% in males and 50% female, while pigmented birthmarks were noticed in 40% males and 60% females. The color of birthmarks were perceived as 45.7% were black or brown, 30.4% red, 6.5% white, 6.5% skin-colored, 6.5% light-brown, 4.3% yellow/orange.

Out of total patients, 71.7% had no change of color during their life-span, 21.7% had become prominent or darkened, 4.3% had become lighter, and, 2.2% had changed color to red (became verrucous). From 32 patients 18.8% birthmarks were present in scalp, 21.9% on face, 12.6% on shoulder and neck, 12.5% on upper limb, 9.4% on lower limb, 18.8% on trunk, and, 9.4% on

hip and lumber area. Out of 37 patients, size of birthmarks differ as 1-3 cms in 37.8%, 4-6 cms in 24.3%, 7-9 cms in 8.1%, 10-12 cms in 5.4%, >13 cms in 24.3%. From the total number of patients, 50.0% had no change of size in age, 45.7 % had increase of size, and, 4.3% had decrease in size. Out of total patients, 4.3% birthmarks became hairy and 6.5% had pain, discharge or bleeding.

Discussion

Internationally various reports and studies have been published on birthmarks. The prevalence of birthmarks has been as high as 80% to 90% in Asians.⁷ An Indian study reported 62.2 % birthmarks in newborns.⁸ No study has been conducted in Pakistan to identify the prevalence and recognition of commonly occurring birthmarks in infants. In our study the prevalence is 28.3 % of those who had developed till one year of life. Female prevalence is higher with (57%) as compared to male (43%).

A survey of birthmarks on 500 Newborns: Clinical Observation in Two Northern Taiwan Medical Center Nurseries was conducted by I-Hsin Shih et al, vascular birthmarks was reported 27.8 % while in our study it is 26.10% which is approximately similar.⁹ In 2010, A Retrospective review of patients identified only 27 patients with nevus birth marks reported commonly on forehead, glabella, upper eyelids and nape. More widespread involvement can be confused with port-wine stains (nervus flammeus) and other vascular birth marks. If we compare with present study we have identified 26.10% in the sample of 10 months in spite of only 100 samples.

Another study has been conducted in Finnish Hospitals taking account of 4346 infants to determine the frequency of birthmarks. Mostly birthmarks were placed on the forehead and neck.

Only 167/4346 (3.8%) had various vascular lesions and 21 (2.1%) had other marks. We just identified 26.10% vascular in our study.¹⁰

Characteristics	Frequency (%)
Gender	
Male	43%
Female	57%
Type of Birthmark	
Vascular	26.10%
Naevus	26.10%
Dermal Menalocyte	39.10%
Vascular & Derma melanocyte	4.30%
Naevus& Dermal melanocyte	4.30%
Site of Birthmark	
Arm	4.30%
Thigh	4.30%
Hip/Lumber area	6.50%
Face	15.20%
Scalp	13.00%
Chest	4.30%
Abdomen	6.50%
Forearm	2.20%
Neck	4.30%
Shoulder	4.30%
Hands/Feet	4.30%
Size of Birthmark	
1-3cm	30.40%
4-6cm	19.60%
7-9cm	6.50%
10-12cms	4.30%
> 16cms	19.60%
Colour of Birthmarks	
Black/Dark Brown	45.70%
Red	30.40%
Yellow/Orange	4.30%
White	6.50%
Skin-coloured	6.50%
Light Brown	6.50%
Change in Size of Birthmark	
Increased in Size	45.70%
Hairy	4.30%
Decreasedin Size	4.30%
Pain/Bleeding in Birthmark	
Yes	6.50%
No	93.50%

Table-I. Distribution of different birthmarks (site, size, colour, changes)

Most reported birthmark is dermal menalocyte nevi being 39.10%. With 45.70% have brown color, around same numbers reported enlargement in size of birthmark. As most studies reported they don't need to be treated unless they have pain or bleeding, in our study 93.50% did not report pain or bleeding, exactly similar results were reported in different studies.^{11,12} However a more extensive and comprehensive study would probably be required in future to further determine the prevalence of birthmarks. Awareness can facilitate the patient's family and physician of better management and guidance.

CONCLUSIONS

Birthmarks are benign lesions; they may be present on any part of body at birth or develop soon afterwards as well. They may grow with age but they do not require active intervention unless there is concern either cosmetically or they have pain or bleeding or discharge. In majority of cases good counseling and observation is all that is required.

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“The best revenge is massive success.”

Frank Sinatra



AUTHORSHIP AND CONTRIBUTION DECLARATION

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