Dermatology Practical & Conceptual

Clinical and Dermatoscopic Features of Seborrheic Keratoses According to Skin Types: A Retrospective Study

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ABSTRACT

Introduction: Seborrheic keratoses (SK), are very common benign skin lesions, which may increase in number and size with age.

Objectives: The aim of the study was to assess any differences seen in seborrheic keratoses in relation to different skin types (ST) and lesion location.

Methods: This was a retrospective observational study of 10-months period, based on dermoscopic images of seborrheic keratoses and patient history recorded in database. Patients were categorized according to their age, sex, skin type, and location of SK.

Results: The frequency of SK remained high on the back for skin type 1, 2, 3 and 4. This same trend was also seen on the face and chest. In skin type 3 we saw a reversal of distribution of SK, the highest frequency remained on the back, and this was followed by the chest rather than the face. In skin type 5 and 6, the nature of the distribution of SK was more facial,

Conclusions: In summary our study shows that SK are more commonly seen in males than in females, they tend to dominate in sun exposed sites especially the back and the face. Both the smaller and larger sized SK dominated in ST 1 and 2. The lighter to darker shades of color seen in seborrheic keratoses varied in accordance with the skin type, with lighter colored SK being seen more in lighter skin types as compared to darker skin types, whereas bluish colored SK were seen in all skin types except ST 1.

Introduction

Seborrheic keratoses (SK), are common benign skin lesions, which increase in number and size with age [1,2]. The diagnosis of SK is usually readily made on clinical and dermoscopic examination, however at times these lesions may mimic malignant skin tumors and are excised to exclude a malignancy [3]. A better knowledge of clinical and dermoscopic characteristics of SK may help avoid unnecessary excisions. We recorded the clinical and dermoscopic images of a series of SK detected on consecutive patients in an outpatient clinic setting over 10-month period at Ashford and St Peters Hospital. We did a retrospective analysis of dermoscopic images of SK in relationship with different patient factors, focusing on patient skin type. Location, size (less ore more than 6 mm in diameter), pigmentation (dividing the lesions into three groups, namely light colored, intermediately pigmented lesions and dark pigmented lesions) and prevalent dermoscopic pattern were recorded. There were sixty-four males and fifty-seven females, with ages ranging between 36-96 years with different Fitzpatrick skin types (ST). A total of 160 SK in 121 patients were recorded. All characteristics are summarized in Table 1 and 2. A wide age range was taken, but there were no patients seen in their twenties or

Table 1. Location of Seborrheic keratoses.

Location	ST 1-2 N (%)	ST 3-4 N (%)	P value
Back	37 (41.6)	23 (32.3)	0.3
Head and Neck	22 (24.7)	14 (19.7)	0.5
Chest	9 (10.1)	14 (19.7)	0.1
Abdomen	9 (10.1)	4 (5.6)	0.46
Limbs	12 (13.5)	16 (22.5)	0.19
Total	89 (100)	71 (100)	

Table 2. All characteristics: pigmentation, size and prevalent dermoscopic pattern of Seborrheic keratoses.

Pigmentation	ST 1-2 N (%)	ST 3-4 N (%)	P value
Light	58 (65.2)	25 (35.2)	<0.01
Intermediate	26 (29.2)	32 (45)	0.06
Heavy	5 (5.6)	14 (19.7)	<0.05
Size			
<6 mm	37 (41.6)	27 (38)	0.77
>6 mm	52 (58.4)	44 (62)	0.77
Dermoscopy features			
Milia	28 (31.4)	23 (32.4)	1
Comedo like openings	45 (50.6)	32 (45.1)	0.6
Fat fingers	50 (56.1)	25 (35.2)	<0.05
Finger printing	9 (10.1)	15 (21.1)	0.08
Reticular lines	4 (4.5)	3 (4.2)	1
Sharp demarcation	23 (25.8)	29 (40.8)	0.06
Hypekeratosis	6 (6.7)	12 (16.9)	0.07
Looped vessels	37 (41.5)	15 (21.1)	<0.05
Total (%)	89 (100)	71 (100)	

below. Yeatman et al, wrote about the frequency, nature and distribution of SKs in 100 Australian adults [4]. Their lowest age range was 15-25. Although the frequency of SKs seen in their study showed a rising trend with age, they reported higher number in younger age groups as compared to any previous studies, this was not our experience.

Previous studies have reported the distribution of SKs generally as on the trunk, hence taking chest and back as

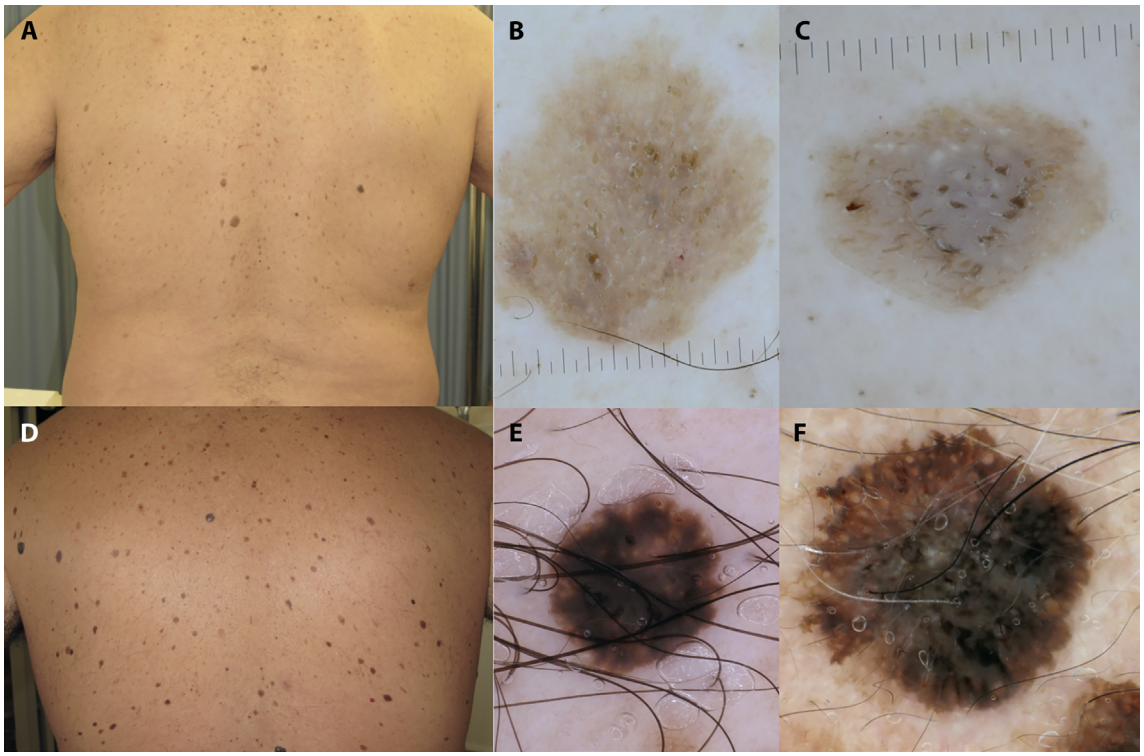

Figure 1. Distribution of Seborrheic keratoses (SKs) according to the skin type. (A-C) Clinical and dermoscopic image of skin type 1-2: skin type 1 and 2 showed the high number of SKs which were lightly pigmented. (D-F) Dermoscopic image of skin type 3-4: skin type 3 and 4 showed heavy pigmented SKs.

one entity, in our study we have reported that separately. We found the highest numbers were seen on the back, followed by head/neck, chest and abdomen.

When we compared the distribution of SKs according to the skin type, we found a higher percentage of SKs on the limbs in skin type 3-4 as compared to lighter skin types, this difference was not statistically significant. We divided the lesion size as a cut off at 6 mm. Our numbers show that larger SK predominated in all skin types.

We also took pigment amount as a category. Lightly pigmented SKs dominated in our study. Skin type 1 and 2 showed the higher number of SKs which were lightly pigmented (Figure 1).

The commonest local features seen in the dermatoscopic images were comedo openings and fat fingers. When comparing to skin types, fat fingers and looped vessels were a common feature in SKs in lighter skin types (< 0.05). Sharply demarcated borders, finger printing and hyperkeratosis SK were more seen in darker skin types, the difference was not statistically significant.

In summary, according to our study, SKs tend to dominate in sun exposed sites especially the back, the lighter to darker shades of color varied in accordance with the skin type, with lighter colored SK being seen more in lighter skin types as compared to darker skin types. Commonest local features seen were comedo openings and fat fingers and the least common were reticular lines or network like structures. We suggest further studies with higher number in each skin category to be able to further verify these findings.

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