International Journal of Current Advanced Research
ISSN: O: 2319-6475, ISSN: P: 2319-6505, Impact Factor: 6.614
Available Online at www.journalijcar.org
Volume 8; Issue 11 (B); November 2019; Page No.20414-20416
DOI: http://dx.doi.org/10.24327/ijcar.2019.20416.3988

Research Article

COLLISION OF MELANOCYTIC NEVI AND SEBORRHEIC KERATOSIS- REPORT OF AN UNUSUAL CASE

Aarthi K, Arvind K*, Tripthi S and Abarnalingam U

Department of Oral & Maxillofacial Surgery, AB Shetty Dental College, Mangalore

A R T I C L E I N F O

Article History:
Received 06th August, 2019
Received in revised form 14th September, 2019
Accepted 23rd October, 2019
Published online 28th November, 2019

Key words:
Seborrheic keratosis, Melanocytic nevus, Collision, UV light.

A B S T R A C T

Seborrheic keratosis is the common benign epithelial tumors of the skin with an increasing incidence with age and exposure to UV light. Melanocytic nevus refers to any benign tumor of nevus cell which can be congenital or acquired. The coexistence or the collision of seborrhoic keratosis and meloncytic nevus in the same tissue specimen is very uncommon. In this paper we present a case of collision tumour in a 75 year old farmer who presented with a chief complaint of black moles on his left face since 10 years. On examination they were soft, non-tender, with irregular surface. Histopathological examination revealed the features of both seborrheic keratosis and junctional nevi in the same lesion suggestive of coexistence of seborrheic keratosis and melanocytic nevi in the same lesion. The present case is unusual because the coexistence of seborrheic keratosis and melanocytic nevi is not a frequent finding in that seborrheic keratosis occurring in association with junctional nevi is extremely rare with only two cases reported in the literature.

INTRODUCTION

Seborrheic keratosis is one of the most common benign epithelial tumors of the skin with an increasing incidence with age and exposure to UV light.[1] They are usually round to oval, tan to dark brown, appears most frequently on the trunk followed by arms, face, and neck.[2]

Melanocytic nevus refers to any benign tumor of nevus cell.They can be broadly classified as congenital melanocytic nevi which are present at birth or appear shortly after birth and acquired melanocytic nevi which appear in adolescence and early adulthood.[3]Clinically acquired melanocytic nevi are well circumscribed, tan to brown, uniformly pigmented, slow growing, round to oval lesions, with regular and well defined borders.[4]

The coexistence of more than one neoplasm in a single cutaneous specimen is relatively uncommon and has been defined as a collision or compound tumour. Collision of seborrhoic keratosis and Melanocytic nevus is extremely rare with only few cases reported in the literature. Here we present a case of collision tumour in a 75 year old farmer with a simultaneous occurrence of seborrheic keratosis and Melanocytic nevus in the same lesion.

Corresponding author:* **Arvind K
Department of Oral & Maxillofacial Surgery, AB Shetty Dental College, Mangalore

CASE REPORT

A 75 year old farmer presented with a chief complaint of asymptomatic black moles on his left face region since 10 years. Past medical history and systemic review were insignificant.

He is a smoker and alcoholic since 20 years. On local examination multiplebrownish-blackwell-circumscribed, uniformly pigmented, flat as well as exophytic lesions were observed on the infraorbital region on the left side of the face (Fig A).

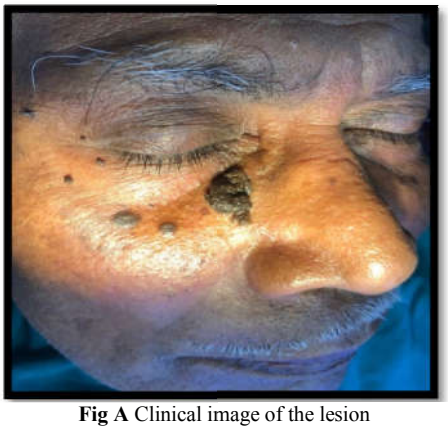

Fig A Clinical image of the lesion

On palpation the lesions were soft in consistency, non-tender, with irregular surface and smooth borders with a larger lesion measuring 2 x 1.5 cm in diameter.

Based on the above features the provisional diagnosis of pigmented nevi was made. The excisional biopsy of the larger

lesion was carried out under local anesthesia and sent for histopathological examination. On gross examination it was brownish black in colour, soft in consistency with irregular surface measuring approximately 2 x 1.5 x 1 cm in diameter (Fig B). The hematoxylin and eosin stained section revealed a papillomatous keratinized stratified squamous epithelium. The epithelium showed hyperkeratosis, acanthosis, numerous horn and pseudo horn cysts.

Fig B Gross image after excision

Proliferation of basaloid cells with variable degree of squamoid differentiation was noted. Proliferation of small, ovoid nevus cells along the basal and the suprabasal layer of the epithelium was seen. Rounded nests of nevus cells with intense accumulation of melanin in and around the cytoplasm exhibiting junctional activity was evident with no cytological evidence of dysplasia (Fig C, D, E, and F). On correlating the clinic pathological findings the final diagnosis of seborrhoic keratosis associated with junctional nevi was made.

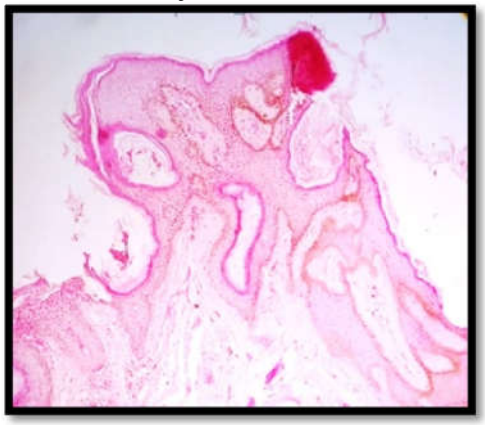

Fig C Papillomatous hyperplastic parakeratinized stratified squamous epithelium (H & E – 10X).

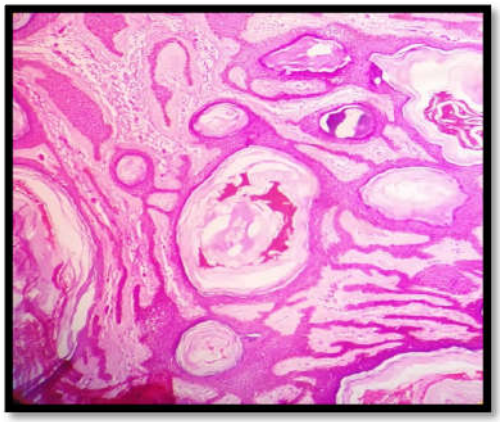

Fig D Proliferation of basaloid cells with hyperkeratosis, acanthosis and numerous horn and pseudohorn cysts (H & E – 40X).

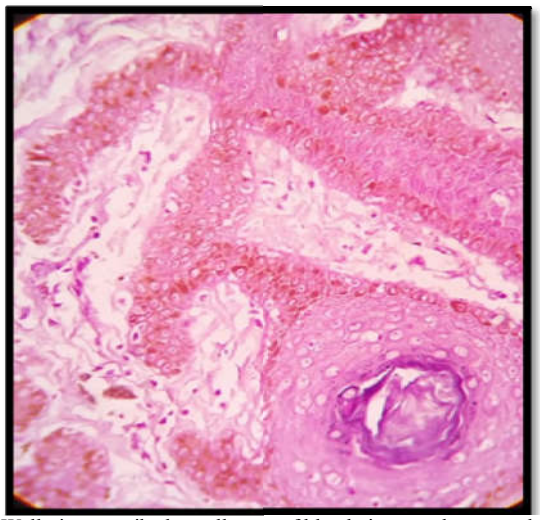

Fig E Well-circumscribed, small nests of bland pigmented nevus exhibiting junctional activity (H & E – 40X).

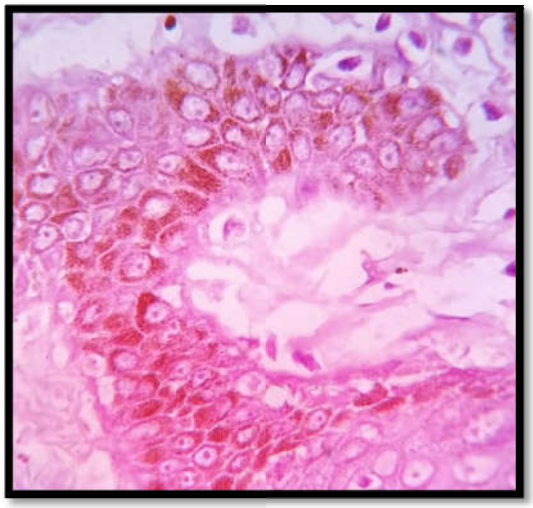

Fig F Coarse melanin pigment in the cytoplasm of nevus cells. (H & E – 100X).

DISCUSSION

Melanocytic nevi also known as signature nevi is a common, largely acquired, condition resulting from benign proliferation of nevus cells.They are variably classified based on their anatomy, architecture and histological pattern.[5]

Seborrhoic Keratosis are sharply demarcated gray-brown to black raised lesions, which may be covered with greasy scales.They may occur in any part of the body except palms and soles.[6]

The most frequent neoplasms associated with the seborrhoic keratosis are Basal cell carcinoma, Squamous cell carcinoma and the neoplasms associated with the Melanocytic nevus are the epidermal cysts, trichoepitheliomas and basal cell carcinomas. But the coexistence or the collision of seborrhoic keratosis and meloncytic nevus in the same tissue specimen is very uncommon and it was first reported by Requena et al. Later it has been reported by Tannous *et al* (2005), DeFazio *et al* (2012),di Giorgi *et al* (2005) and Yong *et al* (2014).[7]

The exact pathogenesis of this type of collision is not known but DeFazio *et al* in his review mentioned that the reason for this collision is that the nevi induce the formation of seborrhoic keratosis by interacting with the stroma therby activating the FGFR3 mutation and epithelial growth.[8]

This type of lesions show equal gender predliction, affecting wide age range from 14 – 82 and seen most commonly on the sun exposed areas of skin.So the common pathogenic trigger in both the lesions is uv light. In the present case the possible etiology is attributed to his occupation prone to sun exposure.Clinically they often appear as asymptomatic, slow growing, brownish black lesions with irregular surface.[1]

Histopathologically they show features of seborrhoic keratosis such as hyperkeratosis, acanthosis, proliferation of basaloid cells with squamoid differentiation and multiple horn and pseudo horn cysts as well as the features of melanocytic nevus such as the nests of nevus cells with coarse melanin pigment showing junctional,compound or intra dermal activity.In the present case it showed features of seborrhoic keratosis and melanocytic nevus with junctional activity which is very rare with only 2 cases reported so far in the literature.[1]

Both are benign lesions and can be removed if the lesion is irritated and for cosmetic reasons.Different methods are used to remove these lesions such as surgical excision and the pigment selective and ablative lasers produce good results.

CONCLUSION

A combination of inherited causes, ultraviolet radiation and other environmental mutagens and advancing age may be the etiology for these type of lesions.A careful diagnostic approach should be used to diagnose pigmented lesions of the skin.

Reference

1. Chong Y, Song D-H, Jang K-T, Park KH, Lee EJ. Concurrent Occurrence of Seborrheic Keratosis and Melanocytic Nevus in the Same Lesion. Our Dermatol Online. 2014; 5(2): 179-182.
2. Jackson JM, Alexis A, Berman B, Berson DS, Taylor S, Weiss JS. Current understanding of seborrheic keratosis: prevalence, etiology, clinical presentation, diagnosis, and management. J Drugs Dermatol. 2015;14(10):1119-1125
3. Gundalli S, Kadadavar S, Singhania S, Kolekar R. Histopathological spectrum of benign melanocytic nevi – our experience in a tertiarycarecentre. Our Dermatol Online. 2016;7(1):21-25.
4. Nagarajan J, Raghuram S, Bandalore SR, Patil S. Intramucosal nevus as a lesion on the lip: A case report. *J Indian Acad Oral Med Radiol* 2016;28:48-51
5. Suh KY, Bolognia JL. Signature nevi. *J Am Acad Dermatol.* 2009;60: 508–514.
6. Ranugha PS Subramaniam, Betkerur JB, Savitha TG, Veeranna S, BasavarajV. The appearance oferuptiveseborrheickeratosesoverlinear verrucous epidermal nevus − A report. Pigment Int 2018;5:47-9.
7. Ghamdi A. Seborrheic Keratosis coexist with congenital melanocytic nevus. *Journal of the Saudi Society of Dermatology & Dermatologic Surgery*. 2013; 17:63-64.
8. DeFazio J, Zalaudek I, Busam KJ, Cota C. Marghoob A. Association between melanocytic neoplasms and seborrheic keratosis: more than a coincidental collision? DermatolPract Conc. 2012;2(2):9.
9. Requena L, Sánchez M, Requena C. Simultaneous occurrence of junctional nevus and seborrheic keratosis. Cutis. 1989; 44:465-6.
10. Boyd AS, Rapini RP. Cutaneous collision tumors. An analysis of 69 cases and review of the literature. Am J Dermatopathol. 1994;16:253-7.

How to cite this article:

Aarthi K *et al* (2019) 'Collision of Melanocytic Nevi and Seborrheic Keratosis- Report of An Unusual Case', *International Journal of Current Advanced Research,* 08(11), pp. 20414-20416. DOI: http://dx.doi.org/10.24327/ijcar.2019.20416.3988

****