ISSN: 2581-5989
PubMed - National Library of Medicine - ID: 101738774

International Journal of Dental Science and Innovative Research (IJDSIR)

IJDSIR : Dental Publication Service

Available Online at: www.ijdsir.com

Volume – 3, Issue – 1, February - 2020, Page No. : 40 - 44

Intraoral Melanocytic Nevi-A Rare Case Report

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Citation of this Article: Dr. Subhasish Burman, Prof. Dr. Swapan Kumar Majumdar, Dr. Aritra Chatterjee, Dr. Soumen Mandal, Dr. Md. Arif Hossain, Dr. Sanjit Barman, Dr. Mohsina Hussain, Dr. Anirban Raha, "Intraoral Melanocytic Nevi-A Rare Case Report", IJDSIR- February - 2020, Vol. – 3, Issue -1, P. No. 40 – 44.

Type of Publication: Case Report

Conflicts of Interest: Nil

Abstract

Melanocytic nevi are benign lesion, originating from proliferations of cells of melanocytic origin. They may be congenital or acquired .Oral congenital melanocytic nevi are rare, and only a few cases have been reported in the literature. The purpose of this study is to present the clinical, histological and immunohistochemical features of an oral congenital melanocytic nevus in a 39-year-old male patient with black complex, treated by incisional biopsy first followed by excisional biopsy. Now long term follow up is required thereby making it an important contribution to the knowledge regarding this uncommon oral mucosa lesion.

Keywords: Oral Mucosa, Congenital Melanocytic Nevus, Histopathology, Immunohistochemistry, Management. Medical Laser, Electrosurgery, Cryotherapy.

Introduction

Melanocytic nevi are congenital or acquired benign proliferations of cells of melanocytic origin derived from neural crest . These lesions are typically found on the skin, and they are uncommon in the oral mucosa . An estimated annual incidence of 4.35 cases per 10 million individuals has been previously described for excised oral melanocytic nevi (OMN) . OMN are observed mainly in the hard palate and buccal mucosa, affecting women more frequently with an average age of 35 years.

The term congenital melanocytic nevus (CMN) should be applied to benign melanocytic proliferations present at birth as well as to lesions that, although not apparent at birth, show typical clinical and histological features of CMN. Oral CMN is rare, and to date, only four well-documented cases have been reported in the English literature .

Case Report

A 39-year-old male patient of dark complex complaining of "a growth in his left lower lingual attached gingiva" was referred to our Dept. of Oral & Maxillofacial Surgery of same institution. Patient reported that he had the lesion since childhood and that a slow and continuous growth in nature. The medical history of the patient was not contributory. A clinical diagnosis of melanocytic nevus was proposed followed by an incisional biopsy was performed, and H&E-stained histological sections which showed a parakeratinized squamous epithelium with hyperplasia and a dense diffuse infiltrate of small monomorphous melanocytes (nevus cells) in the lamina propria. The nevus cells were arranged in a band-like pattern, streaming through collagen bundles and occasionally presenting melanin, but without cellular atypia or mitosis. The mucosal epithelium showed no melanin in basal cells or melanocytic hyperplasia. As per histopathological features final diagnosis of oral CMN was established. Wide local excision of the lesion was performed with a safe margin, along with extraction of left lower 1st molar. A white head varnish soaked gauze was placed over the soft tissue defect and secure with 3-0 silk suture. The gauze was replaced every 2nd days for the 1st week which promoted granulation tissue formation and the gauze was completely removed after 8th days. The specimen was sent for histopathological examination and the report was same as one before. The patient was kept under regular follow up for one month and is advised for periodic follow up in the future.

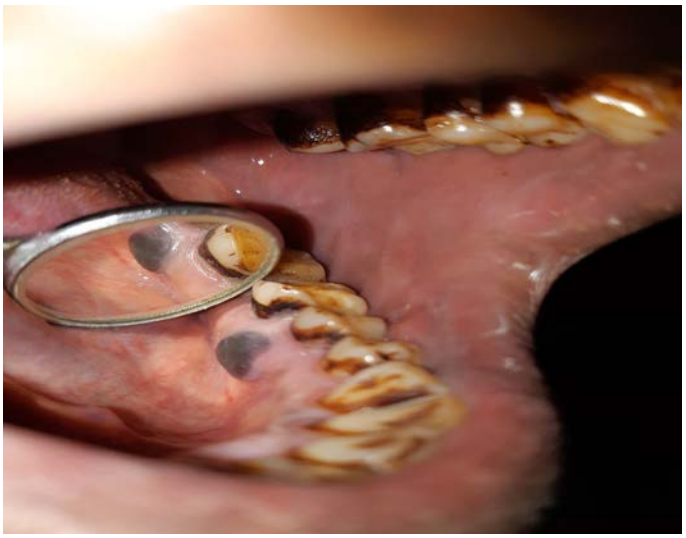


Fig. 1:Preoperative photograph

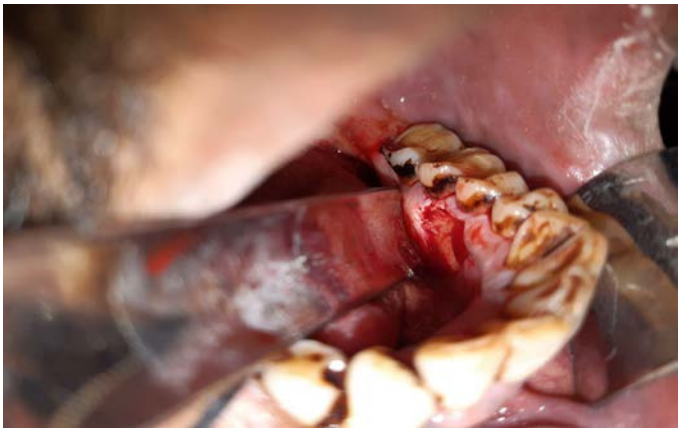


Fig. 2:Excision

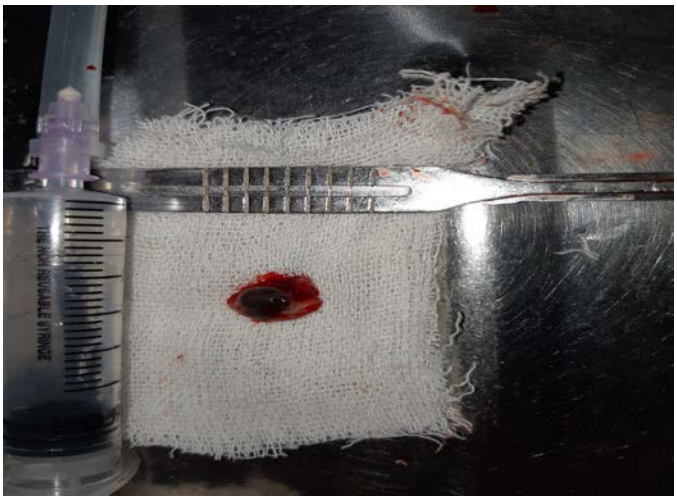


Fig. 3:Specimen

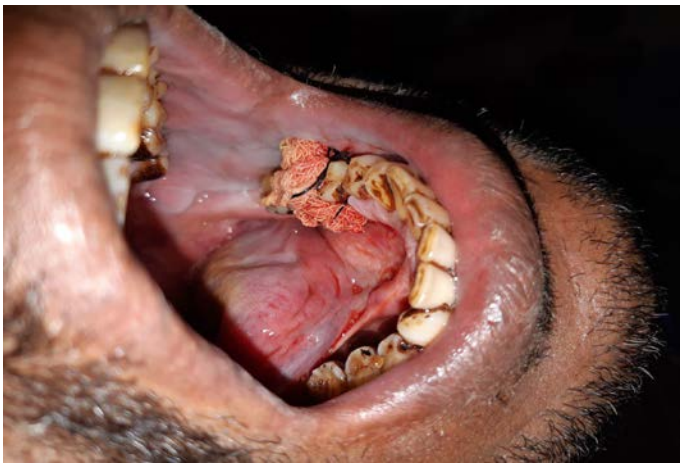


Fig.4.: Wound covered with WHV

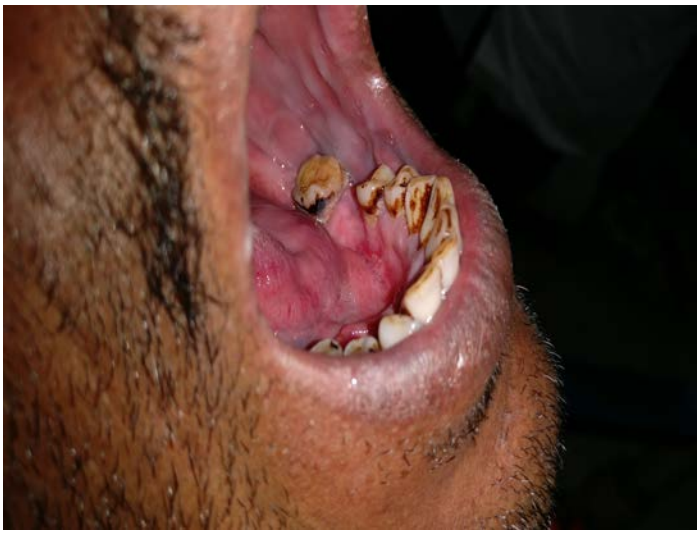


Fig. 5: 2 weeks post operative

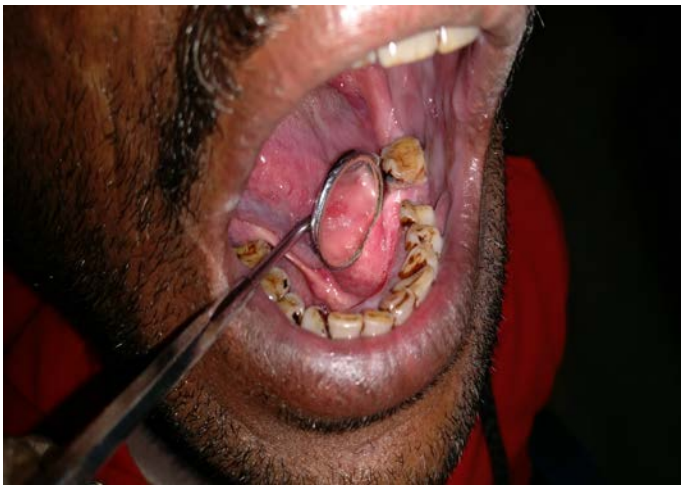
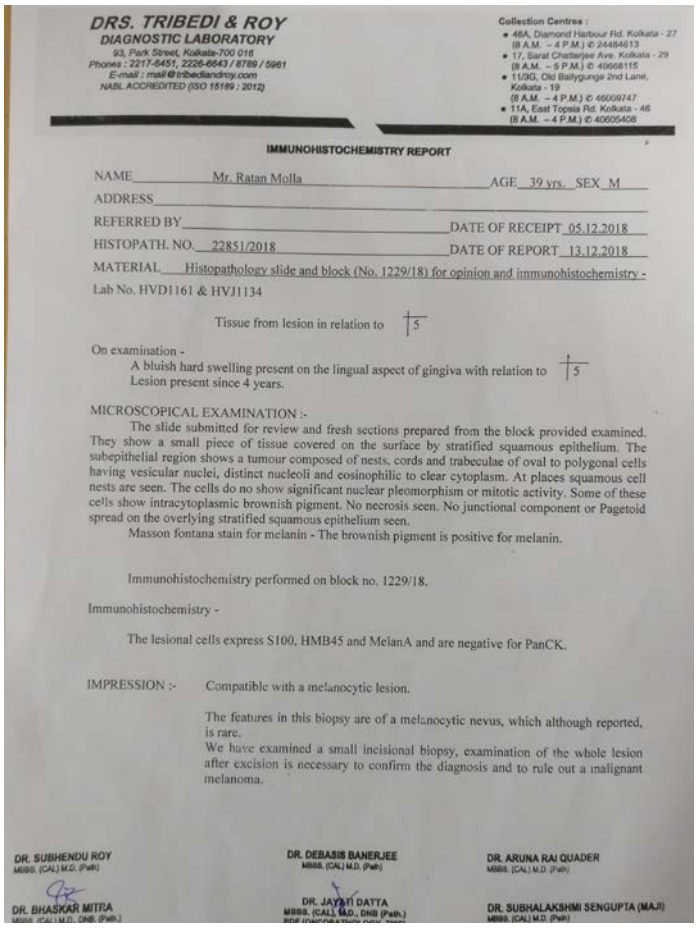


Fig. 6: 6 month postoperative

IHC Report



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IMMUNOHISTOCHEMISTRY REPORT

NAME Mr. Ratan Molla AGE 39 yrs. SEX M
ADDRESS
REFERRED BY DATE OF RECEIPT 05.12.2018
HISTOPATH. NO. 22851/2018 DATE OF REPORT 13.12.2018
MATERIAL Histopathology slide and block (No. 1229/18) for opinion and immunohistochemistry - Lab No. HVD1161 & HVJ1134

Tissue from lesion in relation to 5

On examination -
A bluish hard swelling present on the lingual aspect of gingiva with relation to 5
Lesion present since 4 years.

MICROSCOPICAL EXAMINATION :-
The slide submitted for review and fresh sections prepared from the block provided examined. They show a small piece of tissue covered on the surface by stratified squamous epithelium. The subepithelial region shows a tumour composed of nests, cords and trabeculae of oval to polygonal cells having vesicular nuclei, distinct nucleoli and eosinophilic to clear cytoplasm. At places squamous cell nests are seen. The cells do no show significant nuclear pleomorphism or mitotic activity. Some of these cells show intracytoplasmic brownish pigment. No necrosis seen. No junctional component or Pagetoid spread on the overlying stratified squamous epithelium seen.
Masson fontana stain for melanin - The brownish pigment is positive for melanin.

Immunohistochemistry performed on block no. 1229/18.

Immunohistochemistry -

The lesional cells express S100, HMB45 and MelanA and are negative for PanCK.

IMPRESSION :- Compatible with a melanocytic lesion.

The features in this biopsy are of a melanocytic nevus, which although reported, is rare.
We have examined a small incisional biopsy, examination of the whole lesion after excision is necessary to confirm the diagnosis and to rule out a malignant melanoma.

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Discussion

A melanocytic nevus (also known as nevus cell nevus,nevocytic nevus and commonly as a mole)

It is a melanocytic tumor which contains nevus cells.

The majority of moles appear during the first two decades of life, one in every 100 babies being born with moles.

Moles, or congenital nevi may be at a higher risk for melanoma.

The high concentration of the body's pigmenting agent, melanin, is responsible for their dark color.

Classification Some sources equate the term mole with "melanocytic nevus".

There are various type of nevus. It can be-

1. Junctional nevus: the nevus cells are located along the junction of the epidermis and the underlying dermis.

2. Compound nevus: A type of mole formed by groups of nevus cells.
3. Intradermal nevus: A classic mole or birthmark on the surface of the skin.
4. Dysplastic nevus (nevus of Clark): usually a compound nevus with cellular and architectural dysplasia
5. Blue nevus: It is blue in color as its melanocytes are very deep in the skin.
6. Spitz nevus: a distinct variant of intradermal nevus, usually in a child. They are raised and reddish.
7. Acquired nevus: Melanocytic nevus which is not present at birth or near birth. This includes junctional, compound and intradermal nevus.
8. Congenital nevus: Small to large nevus present at or near time of birth.
9. Giant pigmented nevus: They are large in size, pigmented, often hairy congenital nevi, melanoma may appear occasionally (10 to 15%) in them.
10. Intramucosal nevus: junctional nevus of the mucosa of the mouth or genital areas. In the mouth, they are found most frequently on the hard palate, attached gingiva. They are typically dome shaped and light brown in color.
11. Nevus of Ito and nevus of Ota: congenital, flat brownish lesions on the face or shoulder.

Signs and symptoms: According to the American Academy of Dermatology, the common types of moles are skin tags , raised moles and flat moles. Benign moles are usually brown, pink or black (especially on dark colored skin). They are circular or oval and are usually small (commonly between 1–3 mm), though some can be larger (>5 mm).

Cause

It is thought to be caused by a defect in embryologic development due to proliferation of melanocytes.Melanocytes in the body is responsible for normal skin color, are being produced at extremely high rate. Thus causing clusters instead of spread out and causing abnormal skin pigmentation in some areas of the body.

“Dysplastic nevi and atypical mole syndrome” are hereditary conditions which causes a person to have a large quantity of moles (often 100 or more) with some larger than normal or atypical.[19]

“Sunlight”,Ultraviolet light from the sun causes premature aging of the skin and skin damage that can lead to melanoma.

Hormonal changes during pregnancy and diabetics (i.e. insulin) are often contributing to mole formation.

Conversely, a junctional nevus, which develops at the junction of the dermis and epidermis, is potentially cancerous.

Management: First, a diagnosis must be made. If the lesion is a seborrheic keratosis, then shave excision. Electrodessication or cryosurgery may be performed, usually leaving very little scarring. If the lesion is suspected to be a skin cancer, a skin biopsy must be done first, before considering removal. This is unless an excisional biopsy is warranted. If the lesion is a melanocytic nevus, one has to decide if it is medically indicated or not. If a melanocytic nevus is suspected of being a melanoma, it needs to be sampled or removed and sent for microscopic evaluation for skin biopsy. depending on the size and location of the original nevus one can do a complete excisional biopsy or a punch biopsy.Other reasons for removal may be cosmetic because a raised mole interferes with daily life (e.g. shaving).Additionally, moles can be removed by laser, surgery or electrocautery.

Many dermatologic and plastic surgeons first use a freezing solution, usually liquid nitrogen, on a raised mole and then shave it away with a scalpel.

Conclusion

As melanocytic nevi often undiagnosed by clinician and patient have no complain in most of the cases except pigmentation of skin or mucosa. it has great potential to convert into malignant melanoma,so early detection and excision is needed .

Mole removal may be followed by some discomfort, relieved with pain medication. Second, there is a risk of scab formation or redness will occur. However,that usually heal within one or two weeks. Third, like other surgeries, there is also risk of infection,anesthetic allergy or nerve damage. Lastly, the mole removal may imply an uncomfortable scar depending on the size mole.

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