



Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/15426
DOI URL: <http://dx.doi.org/10.21474/IJAR01/15426>



CASE REPORT

TWO CASES OF SUBUNGUAL MELANOMA OF THE THUMB IN SITU

Otmame Sammouni^{1,2}, Issam Boulazaib^{1,2}, Saber Zari^{1,2}, Mohammed Barrached^{1,2}, Adnane Lachkar^{1,2},
Abdeljaouad Najib^{1,2} and Hicham Yacoubi^{1,2}

1. Faculty of Medicine and Pharmacy, Mohammed Ist University, Oujda, Morocco.
2. Department of Traumatology, Orthopedic Mohammed VI University Hospital Mohammed I University, Oujda, Morocco.

Manuscript Info

Manuscript History

Received: 21 July 2022

Final Accepted: 24 August 2022

Published: September 2022

Key words:

Hutchinson's, Melanoma, Subungual, Surgical treatment

Abstract

Subungual melanoma is a distinct subtype of cutaneous malignant melanoma arising from structures within the nail apparatus, which is relatively rare. Histological diagnosis is the most definitive means of identifying such a lesion and can prevent significant morbidity and mortality. Suspicious signs to be aware of are pigmentation of the nail folds (Hutchinson's sign). Early detection of malignant melanoma is essential to improve treatment outcomes and prognosis. We report two cases of subungual melanoma. Both patients underwent excision of the entire lesion with disarticulation at the interphalangeal joint. The resected margins were found to be free of tumor tissue. The aim of our study is to highlight the typical presentation and clinical features, which help in the early diagnosis and management of subungual melanoma.

Copy Right, IJAR, 2022,. All rights reserved.

Introduction:-

Subungual melanoma or melanotic whitlow is a relatively rare disease with a reported incidence of between 0.7% and 3.5% of all melanoma cases in the general population [1].

Despite the significant improvement in the diagnosis of cutaneous melanomas, the diagnosis of subungual melanoma remains difficult. Despite its visibility and ease of access, it is often misdiagnosed, resulting in delayed treatment. This delay in recognition often leads to a poor prognosis [2].

All persistent nail lesions that do not respond to conservative treatment, whether pigmented or not, should be subjected to excisional biopsy and pathological examination.

We report two cases of subungual melanoma, to highlight the typical presentation and clinical features, which help in its early diagnosis and management. Early detection and awareness are key to successful treatment and prognosis of patients.

Patients And Observation:-

Case 1:

A 66-year-old patient with no notable pathological history who experienced for 12 months, the development of a thin melanonychia band extending from the lunula to the free edge of the thumbnail of the right hand, progressively

Corresponding Author:- Otmame Sammouni

Address:- Department of Traumatology, Orthopedic Mohammed VI University Hospital.

Mohammed I University, Oujda, Morocco

-Faculty of Medicine and Pharmacy, Mohammed Ist University, Oujda, Morocco.

increasing in size with notion of domestic trauma (thumb against the door). Dermatologic examination revealed a diffused, slightly tender swelling involving the distal portion of the right thumb, distal to the interphalangeal joint. The overlying nail plate was hyperpigmented and dystrophic. Hyperpigmentation was also present on the proximal nail fold, hyponychium, and periungual areas (Hutchinson's positive sign). There was no regional adenopathy.

Systemic examination was normal. Biopsy of the left thumb nail bed on histopathological examination revealed features of malignant melanoma.

Investigations such as blood count, urinalysis, liver and kidney functions, abdominal ultrasound and CT abdomen were within normal limits. A detailed evaluation, revealed no features of metastasis.



Figure 1:- Clinical appearance of case 1, showing a thin melanonychia band extending from the lunula to the free edge of the thumb nail of the right hand, with diffuse swelling involving the distal part of the thumb.

Case 2:

A 64-year-old woman with a 6-year history of progressive blackish discoloration of the left thumb nail. There was a history of insidious progressive swelling of the distal aspect of the right thumb. Mild pain was present. There was no history of trauma prior to the onset of the complaints. There was no discharge or itching. He had taken several oral and topical medications, including several oral antifungal treatments without relief.

Dermatological examination revealed melanonychia occupying the entire nail with total onychodystrophy and overflow pigmentation of the thumb pulp with a positive Hutchinson's sign, biopsy of the thumb nail bed on histopathological examination revealed characteristics of malignant melanoma.



Figure 2:- Clinical aspect case 2, dystrophic thumb nail with hyperpigmented nail bed swelling and positive Hutchinson's sign.

Surgical Decision

Both patients underwent excision of the entire lesion with disarticulation at the interphalangeal joint. The resected margins were found to be free of tumor tissue.

After two years of follow-up, both patients showed no signs of recurrence or malignancy.



Figure 3:- Postoperative appearance of case-2 after amputation of the P2 of the thumb with regularization of the articular surface of P1.



Figure 4:- Clinical appearance of case-1 after 8 months of follow-up showing good skin healing with no signs of recurrence.

Discussion:-

Subungual melanoma is a rare form of melanoma [3]. Histological diagnosis is the most definitive way to identify such a lesion and can prevent significant morbidity and mortality. Suspicious signs to be aware of are pigmentation of the nail folds (Hutchinson's sign) [4]. Nail bed detachment, and ulcerative lesions that do not heal [5].

The mainstay of management of melanoma of any kind is excision. The initial excision is a biopsy, which provides a histologic report, and guidelines determine the wide margin of local excision based on the depth of a tumor. The same is true for subungual melanoma [6].

Some surgeons have felt that these rare cases of cancer should be treated aggressively in the form of proximal amputations at the carpo-metacarpal joint or the tarsometatarsal joint. The level of amputation can impair the function of the affected hand or foot, but more recently this form of aggressive treatment has become less acceptable, leading to a search for less radical surgical options to preserve the length of the hand or foot. length. For Cochran et Al published a review of the literature in 2014 which concluded that in situ excision surgery down to the periosteum for early stage melanomas is a reasonable option. Other deeper and higher advanced stage melanomas could undergo amputation at a more distal level (interphalangeal joint) than that advised by Das Gupta [1,5,7].

The surgical management of subungual melanoma has been controversial for the past decade. For many years, the only acceptable management option was digital amputation [6].

The estimated 5-year survival is between 16% and 87%. Prognosis is highly dependent on the thickness of the tumor, called Breslow thickness, the stage of the tumor, and the degree of tumor invasion [7].

Conclusion:-

Subungual melanoma or melanotic whitlow is a relatively rare disease. The surgical management of subungual melanoma has been controversial for the past decade. For many years, the only acceptable management option was digital amputation. Early detection and awareness are key to successful treatment and prognosis of patients.

References:-

- [1]. Levit EK, Kagen MH, Scher RK, Grossman M, Altman E. The ABC rule for clinical detection of subungual melanoma. *J Am Acad Dermatol* 2000;42:269-74.
- [2]. Hudson DA, Krige JE, Strover RM, King HS. Subungual melanoma of the hand. *J Hand Surg Br* 1990;15:288-90.
- [3]. Ronger S, Touzet S, Ligeron C, Balme B, Viallard AM, Barrut D, et al. Dermoscopic examination of nail pigmentation. *Arch Dermatol* 2002;138:1327-33.
- [4]. Hutchinson J. Melanosis often not black: melanotic whitlow. *Br Med J* 1886;1:491-494.

- [5]. Tan KB, Moncrieff M, Thompson JF, McCarthy SW, Shaw HM, Quinn MJ, et al. Subungual melanoma: A study of 124 cases highlighting features of early lesions, potential pitfalls in diagnosis, and guidelines for histologic reporting. *Am J SurgPathol* 2007;31:1902-12.
- [6]. Cochran AM, Buchanan PJ, Bueno RA, Neumeister MW. Subungual melanoma: a review of current treatment. *PlastReconstr Surg*. 2014 Aug;134(2):259-273. [PubMed]
- [7]. Heaton KM, el-Naggar A, Ensign LG, Ross MI, Balch CM. Surgical management and prognostic factors in patients with subungual melanoma. *Ann Surg* 1994;219:197-204.