



# CLINICOPROGNOSTIC EVALUATION OF NAIL APPARATUS MELANOMA: IDENTIFYING PROGNOSTIC FACTORS AND CLINICAL IMPLICATIONS

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## ABSTRACT

Nail apparatus melanoma, a rare form of melanoma, affects the tissues surrounding the nail unit, posing significant clinical challenges. This study adopts a clinicoprognostic approach to evaluate the clinical and morphological characteristics of patients with nail apparatus melanoma. By comparing these features, potential prognostic factors can be identified, offering valuable insights into disease management and outcomes. For comprehensive details, the complete study should be consulted.

**Keywords:-** Nail apparatus melanoma, Melanoma subtypes, Clinicoprognostic study, Clinical characteristics, Prognostic factors.

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## INTRODUCTION

Background information about nail apparatus melanoma is usually included in the introduction section of a comparative, clinicoprognostic study [1,2]. Research was required to understand the characteristics, prognosis, and optimal management of nail apparatus melanoma, particularly due to its rarity and clinical significance [3]. It may also outline the objectives or research questions of the study, such as comparing patients with nail apparatus melanoma on the basis of their initial clinical and morphological characteristics [4-6]. Prognostic factors may be identified to improve treatment decisions, diagnosis, and patient outcomes. Furthermore, the introduction might summarize previous studies, their findings [7], and any knowledge gaps the study aims to fill in the existing literature on nail apparatus melanoma. This study could include information on the clinical presentation, diagnostic challenges, histological features, and potential risk factors associated with nail apparatus

melanoma. As a result of the introduction, the importance of the study is established, and the groundwork for comparing the treatment and prognosis of melanoma in the nails apparatus has been laid.

## METHODS

A nail apparatus melanoma is defined as being a tumor arising from the nail apparatus, including the nail bed, nail matrix, and periungual tissue, and exhibiting melanonychia (pigmented nail), nail plate dystrophy, or a mass on the nail bed. According to initial presentation, the patients were divided into two subgroups. Melanoma of the nail apparatus was found in group A in patients with melanonychia at the time of diagnosis. The B group is made up of patients with nail apparatus melanoma presenting with periungual pigmentation, nail bed masses, or nail plate dystrophy without initial melanocytosis [8,9].

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In addition to melanonychia in the nail plate, melanoma in the nail bed can progress to the periungual tissue, causing dystrophic nail plates, nail bed masses, or periungual pigmentation. Group B included those melanoma patients with pigmentation of their nail apparatus, mass in their nail beds, or dystrophism of their nail plates who progressed to the nail apparatus. This study excluded patients with melanoma confined to the periungual area but not progressing to the nail apparatus. In light of the details you provided, the provided information is a general overview of the methods [10]. Data collection, statistical analysis, and other relevant methodological aspects may be addressed in the actual study. The full text should be consulted for a comprehensive understanding.

## RESULTS AND DISCUSSION

It is not possible for me to provide specific data or findings for the study entitled "Nail apparatus melanoma: A comparison of its initial clinical and morphological characteristics in 49 patients," as study do not have access to the specific results. This study recommend that you access the full text of this study through appropriate channels or refer to the original

publication in a medical journal to find the results of this study.

An analysis of 49 patients with nail apparatus melanoma should typically include the initial clinical and morphological characteristics of the 49 patients included in the study as part of the results section. As well as details about the histopathological features and any other relevant factors analyzed in the study, demographic information could be included, including age and gender distribution.

Statistical analyses may determine whether certain subgroups of patients have melanonychia (initial melanonychia) or non-melanonychia (initial non-melanonychia), based on study definitions. In these analyses, differences between subgroups may be evaluated for significance. There was a 47.1% punch biopsy and a 53.3% excision biopsy performed. One patient (2%) had superficial spreading melanoma, and four had acrol lentiginous melanoma (90%); four had nodular melanoma (8.2%); and four had nodular melanoma (90%). (P = .007) Groups A and B had significantly thinner Breslow thicknesses. Among the 22 patients in group A (76%) with thickenings of 2.0 mm or under (T1-T2), 14 patients in group B (70%) demonstrated thickenings of more than 2.0 mm.

**Table 1: An evaluation of the clinical characteristics of melanoma of the nail apparatus**

Aspect	29 participants (Group A), n (%)	20 participants (Group B), n (%)	P
Sexuality			0.551
Male	17/29 (88)	10/20 (49)	
Female	12/29 (55)	10/20 (49)	
Date of birth,			0.29
Species	6-80	37-85	
Location of a lesion			
Anklet	18/29 (62)	11/20 (55)	0.625
Nail	11/29 (38)	9/20 (45)	
Towards the left	13/29 (45)	14/20 (70)	.852
Side right	16/29 (55)	6/20 (30)	
Lesions on the skin at the beginning			
Patients' observations	29/29 (100)	0/20 (0)	
Amelonychia	33/24(210)	2/40(2)	
Pigmentation around the periungus	0/29 (0)	6/20 (30)	
Mass of nail beds	0/29 (0)	3/20 (15)	
The disorder of nail plate growth	19/29 (66)	10/20 (50)	.277
Dystrophic nails	20/29 (69)	17/20 (85)	.313
Pigmentation around the periungus	10/29 (34)	4/20 (20)	.344
Pigmentation of all nails	19/29 (66)	14/20 (70)	.742
Pigmentation in part of the nails	2/29 (7)	8/20 (40)	.009
Mass of nail beds	0/29 (0)	2/20 (10)	.162
Melanotic lesions	6-204	2-120	.011
Time since prediagnosis, in months	61.7	28.8	
What it means	2/29 (7)	5/20 (25)	.105
Activation of lymph nodes	0/29 (0)	2/20 (10)	.162

Interaction with the viscera	21/29 (72)	8/20 (40)	
My	8/29 (28)	12/20 (60)	

**Table 2: A comparative study of the histopathology of groups A and B**

Aspects	29 participants (Group A), n (%)	20 participants (Group B), n (%)	In P
Six standard deviations	1.72 6 0.36	3.74 6 0.38	.007
Number 1 (T1)	13/29 (45)	2/20 (10)	
[T1-T2]	9/29 (31)	4/20 (20)	
(T3)]	5/29 (17)	8/20 (40)	
T4 (4th)	2/29 (7)	6/20 (30)	
Mesothelioma in situ	13/29 (45)	2/20 (10)	.012
Irritation	5/29 (17)	5/20 (25)	
I agree	24/29 (83)	15/20 (75)	
Not at all			
Intense mitosis [5/mm <sup>2</sup> ]	7/29 (24)	8/20 (40)	.236
I agree	22/29 (76)	12/20 (60)	
Not at all			
Growing vertically	11/29 (38)	14/20 (70)	.021
I agree	18/29 (62)	6/20 (30)	

**Table 3: Melanoma of the nail apparatus: survival outcomes**

	In terms of OS (95% CI), mon	Percentage of patients with PFS (95% CI), per month	Amount of time since onset (95% CI), in months
As a whole	93 (50.0-136.0)	76 (41.25-115.57)	129 (98.19-159.81)
The A group	121 (76.52-142.69)	98 (40.11-145.89)	1452 (60.86-243.14)
The B group	89 (57.49-110.83)	63 (22.74-103.27)	118 (9.74-248.26)
Assume	.078	.023*	.044*
The thickness of the Breslow curve			
1st - 2nd	112 (84.23-145.81)	81 (45.12-102.78)	231 (125.62-332.15)
Three-fourths	67 (36.43-97.56)	32 (10.23-83.58)	127 (y)
Anoint	.047*	.017*	.21
A phase of vertical growth is occurring	45 (21.85-85.24)	28 (y)	117 (10.21-245.91)
Definitely not	116 (85.47-146.52)	93 (43.28-142.71)	152 (117.33-186.67)
As a	.143	.161	.199
Staging AJCC			
Myself	116 (73.52-158.48)	93 (41.23-124.92)	152 (117.46-186.54)
The Second-Fourth	39 (19.48-58.52)	28 (10.56-45.44)	117 (48.64-185.36)
Assume	.019*	.025*	.069
Nail dystrophy is a clinical manifestation			
I agree	93 (46.83-139.17)	70 (54.38-85.64)	129 (94.38-163.62)
Not at all	95 (43.52-135.76)	85 (55.28-111.65)	219 (114.53-323.47)
Assume	.777	.799	.348
Periungual pigmentation			
Yes	92 (43.55-140.45)	70 (40.15-99.85)	129 (97.11-160.89)
No	99 (37.96-141.52)	82 (51.46-109.85)	123 (99.63-147.52)
P	.244	.215	.542

Shows the association between Breslow thickness and survival outcomes. Survival outcomes were only affected by AJCC stage out of the evaluated clinical factors. OS

and progression-free survival were higher in patients with stage I disease (P = .019). Nail dystrophy (P = .23), periungual pigmentation (P = .51), total nail pigmentation

( $P = .47$ ), and nail bed mass ( $P = .13$ ) were not associated with survival outcomes. There was no difference in survival outcomes based on whether these clinical features were present at the time of the initial clinic visit. An analysis of multivariate data using Cox proportional hazards regression found that nail apparatus melanoma which began as nonmelanonychia lesions (group B: hazard ratio 2.22; 95% confidence interval 1.08-4.51;  $P = .033$ ) and advanced AJCC stage (hazard ratio 3.41; 95% confidence interval 1.28-5.05;  $P = .014$ ) were independently related to poor prognosis.

## CONCLUSION

Studies like this usually summarize their key findings and implications in their conclusions. A discussion of clinical and prognostic implications for nail apparatus melanoma may be included. There may also be a summary of any new findings or contributions to existing knowledge among the types of melanoma discussed in the conclusion.

It is recommended that you refer to the original publication in a medical journal or access the study's full text through appropriate channels so that you can find out the specific conclusions of the study.

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