

# 银屑病合并甲损害患者临床资料分析

马美玲<sup>1\*</sup>, 孙兴兴<sup>1</sup>, 丁 媛<sup>2#</sup>

<sup>1</sup>新疆医科大学研究生院, 新疆, 乌鲁木齐

<sup>2</sup>新疆维吾尔自治区人民医院皮肤性病科, 新疆皮肤病临床医学研究中心, 新疆皮肤病研究重点实验室, 新疆 乌鲁木齐

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## 摘要

目的: 为了解银屑病患者合并甲损害的发生率、甲损害临床特征, 甲损害组与无甲损害组在人口学、疾病特征、生活质量评分之间的差异。方法: 收集就诊于新疆维吾尔自治区人民医院2022年8月~2023年8月住院的80例成人银屑病住院患者的相关资料, 将患者分为甲损害组与无甲损害组, 分析甲银屑病相关临床特征。结果: 纳入90例患者, 甲损害发生率为70%, 甲皱襞受累情况: 甲周鳞屑最常见为51例(98.4%), 其次为甲沟炎样软组织肿胀29例(46%), 甲周红斑15例(23.8%)。甲床受累情况: 最常见甲下角化过度为54例(85.7%), 其次为甲分离为47例(74.6%)、甲下油滴征45例(71.4%)、甲下裂片状出血36例(57.1%); 甲母质受累情况: 点状凹陷最为常见为54例(85.7%), 其次为甲白斑26例(41.3%)、甲粗糙脆裂2例(3.2%)、甲半月红斑21例(33.3%)。其他甲损害中最为常见为甲纵脊24例(38.1%)。甲损害组与无甲损害组在体重、BMI、PASI、BSA、DLAI方面差异有统计学意义( $p < 0.05$ )。银屑病甲损害严重程度指数与甲损害病程、甲银屑病生活质量量表评分相关; 皮肤病生活质量指数与年龄、病情严重程度相关。甲损害组平均体重高于无甲损害组( $t = 2.21, p = 0.03$ ), 甲损害组平均BMI高于无甲损害组( $t = 2.15, p = 0.027$ )。结论: 银屑病合并甲损害常见, 发生较多的为甲周鳞屑、甲下角化过度和点状凹陷。体重大、病情严重者更易出现甲损害。银屑病甲损害对年轻患者生活质量的影响较大, 更重视银屑病对外观造成的影响。

## 关键词

银屑病, 甲损害, 生活质量, 临床特征

# Analysis of Clinical Data of Patients with Psoriasis Combined with Nail Damage

Meiling Ma<sup>1\*</sup>, Xingxing Sun<sup>1</sup>, Yuan Ding<sup>2#</sup>

<sup>1</sup>School of Postgraduate, Xinjiang Medical University, Urumqi Xinjiang

<sup>2</sup>Department of Dermatology and Venereology, People's Hospital of Xinjiang Uygur Autonomous Region, Xinjiang

\*第一作者。

#通讯作者。

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Clinical Research Center for Dermatology, Xinjiang Key Laboratory of Dermatology Research, Urumqi Xinjiang

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## Abstract

**Objective:** To understand the incidence of nail damage in patients with psoriasis, the clinical characteristics of nail damage, and the differences in demographics, disease characteristics, and quality of life scores between the nail damage group and the non-nail damage group. **Methods:** Collecting relevant data of 80 adult inpatients with psoriasis who were hospitalized at the People's Hospital of the Xinjiang Uygur Autonomous Region from August 2022 to August 2023. The patients were divided into nail damage groups and non-nail damage groups, and nail psoriasis disease-related clinical features was analyzed. **Results:** 90 patients were included, and the incidence of nail damage was 70%. Nail fold involvement: periungual scales were the most common in 51 cases (98.4%), followed by paronychia-like soft tissue swelling in 29 cases (46%). There were 15 cases (23.8%) of periungual erythema. Nail bed involvement: Subungual hyperkeratosis was the most common in 54 cases (85.7%), followed by onycholysis in 47 cases (74.6%), subungual oil drip sign in 45 cases (71.4%), and subungual splinter hemorrhage in 36 cases. cases (57.1%); nail matrix involvement: punctate depression was the most common in 54 cases (85.7%), followed by nail leukoplakia in 26 cases (41.3%), rough and brittle nails in 2 cases (3.2%), and nail half-moon erythema in 21 cases Example (33.3%). Among other nail injuries, the most common one was the longitudinal ridge of the nail in 24 cases (38.1%). There were statistically significant differences between the nail damage group and the non-nail damage group in weight, BMI, PASI, BSA, and DLAI ( $p < 0.05$ ). The psoriasis nail damage severity index is related to the course of the nail damage and the nail psoriasis quality of life scale score; the skin disease life quality index is related to age and disease severity. The average weight of the nail damage group was higher than that of the non-nail damage group ( $t = 2.21, p = 0.03$ ), and the average BMI of the nail damage group was higher than that of the non-nail damage group ( $t = 2.15, p = 0.027$ ). **Conclusion:** Psoriasis combined with nail damage is common, and periungual scales, subungual hyperkeratosis and punctate depressions are more common. People who are heavy and have severe disease are more likely to suffer from nail damage. Psoriatic nail damage has a greater impact on the quality of life of young patients, and more attention is paid to the impact of psoriasis on appearance.

## Keywords

Psoriasis, Nail Damage, Quality of Life, Clinical Features

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## 1. 引言

银屑病(psoriasis, PSO)是一种以表皮细胞增生、炎细胞浸润及微血管扩张为特点的慢性炎症性皮肤病。银屑病影响全球约 1.25 亿人[1]。银屑病除了皮肤改变, 还可出现其他特殊部位的病理性改变, 如银屑病甲损害、关节型银屑病、头皮银屑病、生殖器银屑病[2]。银屑病患者甲损害发生率约为 10%~80%, 银屑病患者一生中出现甲银屑病的发生率高达 80%~90% [3], 大部分银屑病患者手指和脚趾都伴有甲损

害[4]。有作者认为银屑病伴甲损害患者可能与银屑病严重程度、发病部位、疾病持续时间、银屑病类型等有相关性[5] [6]。例如，Tham 等[7]发现，年龄大于 50 岁，病程超过 5 年，中重度银屑病、甲皱襞受累、头皮银屑病或关节型银屑病的患者更易发生家银屑病。银屑病伴甲损害根据累及甲单位的不同，呈现不同的临床表现。例如：甲皱襞受累时，可表现为鳞屑和甲沟炎样软组织肿胀；甲母质受累时，可表现为不规则点状凹陷、白甲、甲粗糙脆裂、甲半月红点、甲横沟/纵脊、甲变色、甲板增厚和甲营养不良性破碎；甲床受累时，可表现为甲分离、油滴征、甲下角化过度和裂片形出血。既往研究认为，银屑病甲损害患者以点状凹陷、甲下角化过度、甲纵脊为主要表现[8]。银屑病伴甲损害的严重程度指数(NASPI)是最常用的评分系统，根据每个象限甲母损害(点状凹陷、甲白斑、甲半月红斑、甲碎裂)和甲床损害(油污变色、甲剥离、甲下角化过度和裂片状出血)来评估[9]。银屑病伴甲损害对患者造成生理及心理的痛苦，严重影响患者生活质量[10]。目前其治疗具有挑战性，因而早期诊断和治疗甲银屑病，对改善银屑病患者的生活质量及预后有重要的意义[10]。本文研究银屑病住院患者甲损害发生率、临床特征、甲损害组与无甲损害者的相关差异，以期了解并完善银屑病甲损害相关临床资料，为更好防治银屑病甲损害提供参考。

## 2. 资料与方法

### 2.1. 一般资料

新疆维吾尔自治区人民医院皮肤科 2023 年 2 月~2023 年 8 月经排除纳入标准筛选银屑病患者。收集纳入患者以下资料：① 银屑病患者性别、年龄、民族、职业、BMI、吸烟史、饮酒史；② 甲损害资料：甲损害病程、甲损害类型(甲基质：点状凹陷、博氏线/横沟、白斑、甲破裂、甲红点；甲床：甲剥离、油滴征、甲变色、甲下角化过度)；③ 相关评分：银屑病皮损面积和严重程度指数(psoriasis area and severity index, PASI)、甲银屑病严重程度指数(nail psoriasis severity index, NAPSI)、皮肤病生活质量指数(dermatology life quality index, DLQI)。

### 2.2. 方法

纳入标准：① 银屑病患者符合银屑病诊断标准[11]；② 银屑病甲损害患者[12]：确诊为银屑病，合并指甲损害(甲基质：点状凹陷、博氏线/横沟、白斑、甲破裂、甲红点；甲床：甲剥离、油滴征、甲变色、甲下角化过度；甲皱襞受累表现：鳞屑、甲沟炎样软组织红肿)；对甲银屑病患者临床亚型和皮肤镜特征进行统计。③ 年龄  $\geq 18$  岁；

排除标准：① 合并其他甲病、真菌镜检阳性；② 少三个月行全身或局部治疗；③ 合并其他感染性疾病；④ 慢性湿疹、雄激素源性脱发和扁平苔藓等皮肤病所致甲改变的患者；⑤ 半年内接受过人工美甲的患者；⑥ 不愿接受皮肤镜检查；⑦ 年龄  $< 18$  岁；⑧ 严重原发性疾病或精神疾病患者。

### 2.3. 统计学处理

应用 SPSS 25.0 进行统计学分析。正态分布定量资料以平均数标准差( $\bar{x} \pm s$ )表示，采用 t 检验；偏态分布定量资料以中位数(四分位数间距)M (P25, P75)表示，采用秩和检验。采用多元线性回归分析 NAPSI 总分、DLQI 评分的影响因素。 $p < 0.05$  具有统计学意义。

## 3. 结果

### 3.1. 人口学特征

发生甲损害的男性患者多于女性，但统计学无显著意( $z = 63.32, p = 0.12$ )，甲损害组平均体重高于无甲损害组( $t = 2.21, p = 0.03$ )，甲损害组平均 BMI 高于无甲损害组( $t = 2.15, p = 0.027$ )。

### 3.2. 甲损害情况

本研究共纳入 90 例患者，其中甲损害患者 63 例，发生率为 70%，甲皱襞受累情况：甲周鳞屑最常见为 51 例(98.4%)，甲沟炎样软组织肿胀 29 例(46%)，甲周红斑 15 例(23.8%)。甲床受累情况：最常见甲下角化过度为 54 例(85.7%)，其次为甲分离为 47 例(74.6%)、甲下油滴征 45 例(71.4%)、甲下裂片状出血 36 例(57.1%)；甲母质受累情况：点状凹陷最为常见为 54 例(85.7%)，其次为甲白斑 26 例(41.3%)、甲粗糙脆裂 2 例(3.2%)、甲半月红斑 21 例(33.3%)。其他甲损害中最为常见为甲纵脊 24 例(38.1%)。

### 3.3. 疾病特征

甲损害组的 PASI 评分为 $(15.23 \pm 6.41)$ 分，无甲损害组 PASI 评分为 $(9.35 \pm 3.3)$ 分，差异有统计学意义( $t = -4.76, p < 0.001$ )。银屑病甲损害患者 NAPSI 总分为 49 (33.57) 分，靶指甲 NAPSI 评分为 5 (4.7) 分，甲损害组 DLQI 评分为 14 (11, 17)，无甲损害组 DLQI 评分为 8 (5, 12)，两组间差异有统计学意义( $Z = -4.89, p < 0.001$ )。甲损害病程为 36 (12, 72) 月，甲损害在皮肤损害发生 84 (26, 168) 月后出现(见表 1)。

**Table 1.** General information of the nail damage group and the non-nail damage group [ $\bar{x} \pm s$ , [(n) %], M (P25, P75)]

**表 1. 甲损害组与无甲损害组一般资料**[ $\bar{x} \pm s$ , [(n) %], M (P25, P75)]

变量值	有甲损害(n = 63)	无甲损害(n = 27)	t/Z	p
男性	44 (44.89%)	21 (23.3%)	3.32	0.12
发病年龄	$33.9 \pm 15.38$	$37.3 \pm 15.47$	0.93	0.353
体重	$86.2 \pm 35.53$	$74.2 \pm 14.67$	2.21	0.030
BMI	$25.6 \pm 4.01$	$21.1 \pm 7.5$	2.15	0.027
DLQI	14 (11.17)	8 (5, 12)	-4.894	<0.001
PASI	13 (11.6, 16.8)	9 (6.15, 11.92)	-4.761	<0.001
BSA	12 (8, 17)	8 (5.5, 10)	-3.323	<0.001
出现甲损害时间/月	36 (12.72)	-	-	-
病程/月	120 (48, 240)	132 (117, 240)	-1.57	0.116
NASPI(靶甲)	5 (4, 7)	-	-	-
NASPI(总)	76 (33, 101.5)	-	-	-
诊断年龄	49 (33, 57)	53 (37.75, 66.25)	-1.62	0.105
合并代谢综合征	15 (23.8)	9 (34.6%)	-1.039	0.299

PASI，银屑病皮损面积和严重程度指数；BSA，体表皮损面积；DLQI，皮肤病生活质量指数；NASPI 甲银屑病严重指数评分，BMI，审议质量指数。

### 3.4. 影响 NAPSI 评分的相关因素

以性别、年龄、体重、体重指数、PASI 评分、银屑病病程、甲损害病程、BSA 评分、DLQI 评分为自变量，以构建多因素线性回归方程。结果显示 PASI 评分 X1、BSA X2 (%)、DLQI X3 对 NAPSI 评分 Y 的影响差异有统计学意义(见表 2)。

### 3.5. 影响 DLQI 评分的相关因素

以性别、年龄、体重、体重指数、PASI 评分、银屑病病程、甲损害病程、BSA 评分、DLQI 评分为自变量构建多因素线性回归方程。结果显示年龄 X1 (岁)、PASI X2 对 DLQI Y 评分的影响差异有统计学

意义(见表3)。

**Table 2.** Multiple linear regression analysis on the severity index score of psoriasis nail damage

**表2.** 影响银屑病甲损害严重程度指数评分的多元线性回归分析

变量	b 值	b 值的 95% CI	b 值标准误	t 值	p 值
PASI X1	0.095	[0.179, -0.369]	0.136	7.87	<0.001
BSA X2	0.037	[0.198, -0.124]	0.8	0.099	0.012
DLQI X3	2.13	[1.23, 2.48]	0.18	8.78	<0.001

PASI, 银屑病皮损面积和严重程度指数; BSA, 体表皮损面积; DLQI, 皮肤病生活质量指数。

**Table 3.** Multiple linear regression analysis on the impact of silver skin disease quality of life index score

**表3.** 影响银皮肤病生活质量指数评分的多元线性回归分析

变量	b 值	b 值的 95%CI	b 值标准误	t 值	p 值
年龄 X1	-0.13	[-0.22, -0.04]	0.04	-2.9	0.005
PASI X2	0.39	[0.27, 0.51]	0.06	6.56	<0.001

#### 4. 讨论

本研究纳入 90 例银屑病患者，其中有甲损害的患者达 70%。Radtke 等[10]调查 661 例银屑病患者发现 47.4% 合并甲损害；宋海燕[13]报道山东省寻常型银屑病住院患者中 53.39% 伴甲损害。意大利学者报道 76.9% 存在指甲受累[14]。有研究发现，银屑病患者甲损害发生率约为 10%~80% [15]，银屑病患者一生中出现甲银屑病的发生率高达 80%~90% [3]。大部分银屑病患者手指和脚趾都伴有甲损害，表现出甲疼痛与功能障碍[16] [17]。游梦紫[18]等人的研究发现，由于拇指占手部功能的 50%，银屑病甲损害患者通常容易累及拇指[19]。同样第一足趾也由于经常暴露在重复的物理刺激下，在向前运动期间，它在关节上承受最大力，占体重的 40%~60% [20]，意味着 Koebner 现象可能在银屑病指甲变化的发作中起重要作用(例如创伤可能诱发或加剧银屑病)。在本研究中，甲皱襞受累情况：最常见的为甲周鳞屑 51 (98.4%)。甲床受累情况：最常见甲下角化过度为 54 (85.7%)，其次为甲分离 47 (74.6%)、甲下油滴征 45 (71.4%)、甲下裂片状出血 36 (57.1%); 甲母质受累情况：点状凹陷最为常见为 54 (85.7%)，其次为甲白斑 26 (41.3%)、甲粗糙脆裂 2 (3.2%)、甲半月红斑 21 (33.3%)。其他甲损害中最为常见为甲纵脊 24 (38.1%)。这与大部分研究基本一致[10] [18] [21]。近年来研究认为银屑病患者常合并各种疾病，如银屑病关节炎、代谢综合征、心血管疾病、炎症性肠病等[22] [23] [24]。共病的出现可加重银屑病患者的严重程度及延长病程，其中最重要和最常见的共病就是代谢综合征。代谢综合征是一组复杂的代谢紊乱症候群，包括肥胖、高血压、糖代谢异常、脂代谢紊乱、高胰岛素血症、高尿酸血症、血液高凝状态和微量白蛋白尿等，同时合并上述疾病中 3 项或以上者可诊断代谢综合征[25]。银屑病与代谢综合征是相互促进的，有着相同的炎性通路，使银屑病炎症反应加重[26]。Peng [27] 等表示有银屑病共病的患者有较高的甲受累率。虽然国外一项 156 例银屑病甲损害患者的回顾性研究认为与无甲损害的银屑病患者相比，银屑病甲损害患者与代谢综合征没有关联( $p < 0.05$ ) [28]。本研究中，甲损害组患者发生代谢综合征发生率虽然两组间无明显统计学差异，但甲损害组合并 MS 例数高于无甲损害组。国外一项研究发现[16]，银屑病甲损害组体重较高的患者多于无甲损害组，两者间无明显统计学差异。这与本研究一致。以上结果提示银屑病甲损害的患者发生代谢综合征几率可能会更高，银屑病甲损害患者的 BMI 可能会更高，BMI 作为诊断代谢综合征的指标之一，对于 BMI 高的患者要早期干预，指导患者合理减重、健康饮食生活[29]。本研究通过多元线性回归分析

得出 PASI、BSA、DLQI 越高, NASPI 评分越高; 年龄越小、PASI 评分越高, DLQI 越高。这提示银屑病甲损害对年轻患者生活质量的影响较大, 更重视银屑病对外观造成的影响[30]。

综上, 银屑病患者合并甲损害发生率高, 加剧患者皮肤疾病严重程度, 严重影响患者生活质量。对于银屑病甲损害 BMI 高的肥胖患者, BMI 越高可能会进一步加剧银屑病炎症反应, 从而加重银屑病甲损害, 导致患者甲损害, 影响患者功能、生活质量。对于代谢综合征是否会进一步加剧银屑病甲损害, 银屑病合并代谢综合征患者其甲损害临床特征是否会发生变化, 目前尚无相关研究。因此, 在治疗中需要高度重视此类患者并尽早干预治疗, 从而改善患者疾病严重程度及生活质量。

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