



DERMOSCOPY AND SKIN IMAGING

## CLINICAL AND DERMOSCOPIC CHARACTERISTICS OF MELANOCYTIC LESIONS ON THE VOLAR SKIN WITHOUT TYPICAL DERMOSCOPIC PATTERNS.

*Akane Minagawa<sup>(1)</sup> - Yasutomo Mikoshiba<sup>(1)</sup> - Hiroshi Koga<sup>(1)</sup> - Yoshiharu Yokokawa<sup>(2)</sup> - Hisashi Uhara<sup>(3)</sup> - Ryuhei Okuyama<sup>(1)</sup>*

*Shinshu University School Of Medicine, Dermatology, Matsumoto, Japan<sup>(1)</sup> - Shinshu University School Of Health Sciences, Physical Therapy, Matsumoto, Japan<sup>(2)</sup> - Sapporo Medical University School Of Medicine, Dermatology, Sapporo, Japan<sup>(3)</sup>*

**Introduction:** It is challenging to differentiate melanoma from melanocytic nevus on the volar skin in the absence of typical dermoscopic patterns.

**Objective:** Identify the clinical and dermoscopic characteristics of melanocytic lesions not displaying the parallel furrow (PFP), lattice-like (LLP), fibrillar (FP), or parallel ridge (PRP) patterns.

**Materials and Methods:** In this retrospective cohort study, 504 melanocytic lesions on the volar skin were included who were evaluated in the Department of Dermatology at Shinshu University Hospital between 2000 and 2012. Dermoscopic images were independently assessed by 3 experienced dermoscopists for the presence of established dermoscopic criteria.

**Results:** One hundred and ten (melanocytic nevus: 97, melanoma: 8, equivocal melanocytic lesion: 5) lesions (22%) did not exhibit any of the typical PFP, LLP, FP or PRP. Among them, patient age and lesion size were significantly higher for melanoma than for melanocytic nevus ( $p < 0.01$ ). Whereas melanomas and equivocal melanocytic lesions localized over the weight-bearing areas of the foot sole such as the heel, while nevi tended to be located on the non-weight-bearing areas. Dermoscopically, 95 of 97 melanocytic nevi (98%) were symmetrical while the melanomas were not. Ninety-four nevi (94%) had 1 or 2 colors per lesion, versus 3 or more colors in 4 of 8 melanomas (50%). Vascular structures (3% and 38%), blue-white structures (18% and 38%), and dots/globules (23% and 50%) were respectively observed in both nevi and melanomas but were irregularly distributed in the latter. Ulceration, hyperkeratosis, and irregular streaks were observed only in cases of melanoma.

**Conclusions:** One-fifth of melanocytic lesions on the volar skin did not display typical





dermoscopic patterns. Asymmetry, multiple colors ( $\geq 3$ ), and melanoma-specific dermoscopic structures were more frequently observed for melanoma. Patient age, lesion size, and location were additional helpful findings to differentiate melanoma from melanocytic nevus.

