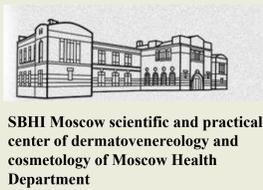


# FAMMM-syndrome: dermatoscopic, in vivo confocal microscopic and histopathologic findings and its correlation

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## Introduction

Dysplastic nevi in FAMMM-syndrome are characterized by polymorphous clinical and dermatoscopic appearance making it difficult to diagnose early melanoma among them. Digital dermatoscopic image analysis and reflectance confocal microscopy (RCM) improve diagnostic performance.

**Objective:** to elaborate recommendations on monitoring of patients with FAMMM-syndrome.

## Materials&Methods

852 melanocytic lesions of 43 y.o. and 47 y.o. female patients with FAMMM-syndrome (melanoma was diagnosed in their mothers at 45 and 53 y.o.) were followed with dermatoscopy with 2-3 months' interval for 9 months, 32 lesions with most pronounced chaos in dermatoscopy were examined with RCM. 15 lesions were removed.

## Results

In patient B. first melanoma was detected during first visit. After two months one lesion developed asymmetrical changes and appeared to be melanoma in situ. And after three months two more dermatoscopically stable melanomas in situ were removed due to severe dysplasia, revealed by RCM (ringed and/or meshwork pattern, large nucleated cells, junctional nests with atypical cells, etc.).

In patient N. first melanoma was detected at 42 y.o. (melanoma in situ), the 2nd at 47 y.o. Although dermatoscopically 2<sup>nd</sup> lesion was not suspicious RCM revealed melanoma signs and diagnosis was confirmed by histological examination.

### Digital dermatoscopic image analysis

### Reflectance confocal microscopy (RCM)

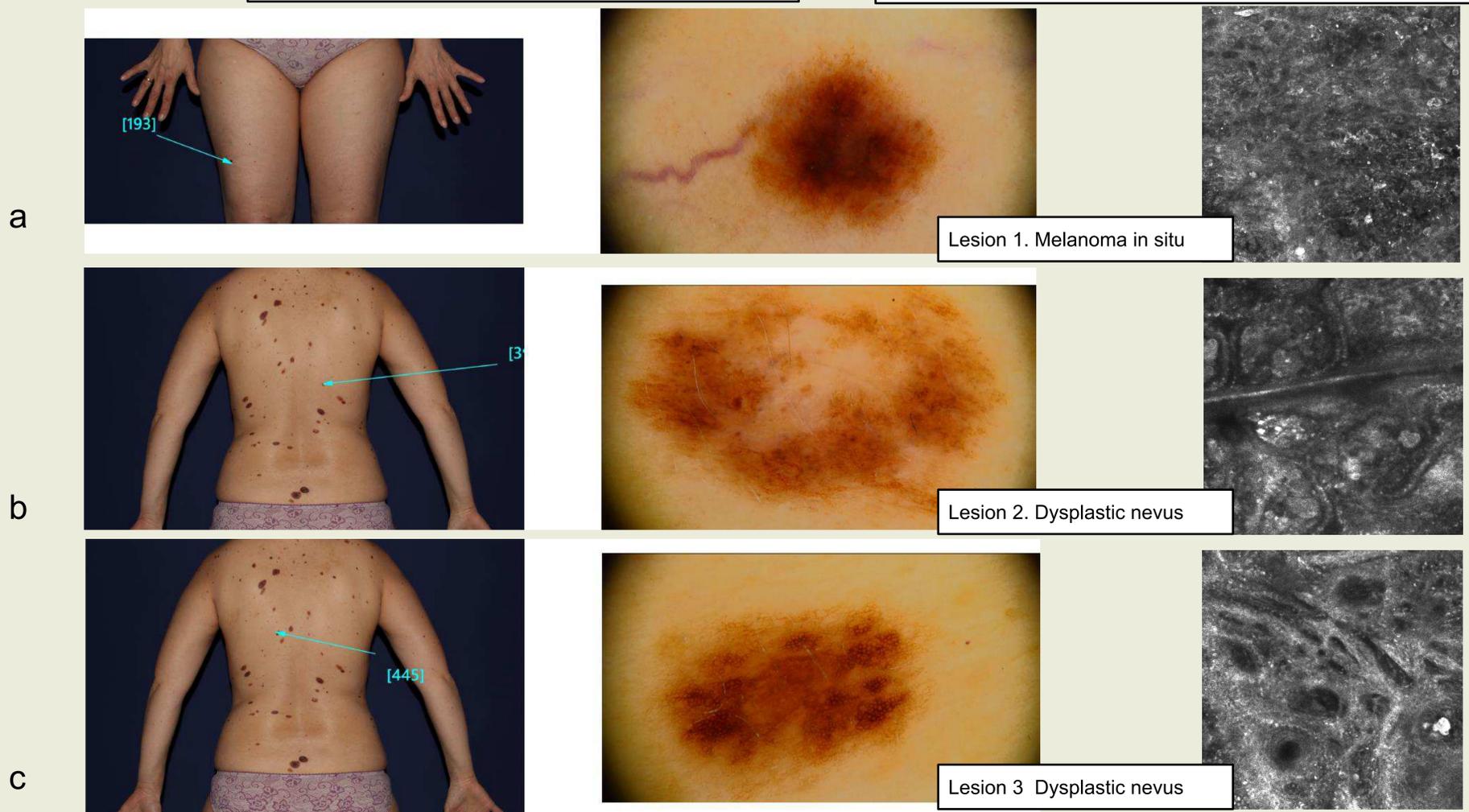


Fig. 1. Melanoma in situ (a) and dysplastic nevi (b, c) in patient with FAMMM-syndrome

## Conclusions

- Patients with FAMMM-syndrome and their relatives should be examined after late puberty every 6 months, and after 35 y.o. every 3 months.
- In case of multiple suspicious lesions in vivo RCM should be used to choose mostly suspicious ones. Lesions with are new, changing or reveal severe atypia on RCM should be excised.
- RCM improve melanoma detection and should be routinely used for monitoring of patients with FAMMM-syndrome.

## References

- Gill M, Longo C, Farnetani F, Cesinaro AM, Gonzalez S, Pellacani G. Non-invasive in vivo dermatopathology: identification of reflectance confocal microscopic correlates to specific histological features seen in melanocytic neoplasms. *J Eur Acad Dermatol Venereol.* 2014;28(8):1069-78.
- Grant-Kels JM, Pellacani G, Longo C. Reflectance Confocal Microscopy Clinical Applications: The Skin from Inside. *Dermatologic clinics.* 2016;34(4):xiii-xiv.
- Lynch HT, Shaw TG. Familial atypical multiple mole melanoma (FAMMM) syndrome: history, genetics, and heterogeneity. *Familial cancer.* 2016;15(3):487-91.
- Moscarella E, Pampena R, Kyrgidis A, Tion I, Longo C, Lallas A, et al. Digital dermoscopy monitoring in patients with multiple nevi: How many lesions should we monitor per patient? *J Am Acad Dermatol.* 2015;73(1):168-70.
- Moscarella E, Tion I, Zalaudek I, Lallas A, Kyrgidis A, Longo C, et al. Both short-term and long-term dermoscopy monitoring is useful in detecting melanoma in patients with multiple atypical nevi. *J Eur Acad Dermatol Venereol.* 2017;31(2):247-51.

### Conflict of interest

In relation to this presentation, I declare that there are no conflicts of interest.

### Further information

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