

## Medical > In Vivo > Non-Melanoma Skin Cancer Research > Squamous Cell Carcinoma and Actinic Keratosis

# 48

Follow-up of actinic keratoses after shave biopsy by in-vivo reflectance confocal microscopy--a pilot study.

Richtig E, Ahlgrimm-Siess V, Koller S, Gerger A, Horn M, Smolle J, Hofmann-Wellenhof R.; *J Eur Acad Dermatol Venereol.* 2010 Mar;24(3):293-8, JEADV. JDV3410. DOI: 10.1111/j.1468-3083.2009.03410.x.2009:216-29, 2009

### ABSTRACT

**BACKGROUND:** Monitoring of treatment efficacy after shave biopsy of actinic keratoses (AK) is often difficult, as clinical and dermoscopic features may not be reliable.

**OBJECTIVES:** We investigated the applicability of in-vivo reflectance confocal microscopy (RCM) for the follow-up of AK after shave biopsy.

**METHODS:** A total of 10 lesions were investigated by RCM before shave biopsy, after 3 and 12 months by two observers in agreement blinded to location, patients and time interval.

**RESULTS:** At baseline all lesions showed typical clinical, dermoscopic and RCM criteria of AK. Three months after shave biopsy, all lesions presented clinically as normal skin (NS), but two lesions showed features suspicious for AK by RCM. After 12 months, one lesion of these two lesions changed into NS in RCM, whereas the other lesion progressed into clinical visible AK. At baseline, the two observers diagnosed 10 of 10 lesions correctly in RCM, after 3 months eight of 10 lesions and after 12 months all lesions were diagnosed correctly.

**CONCLUSIONS:** Our results suggest that RCM might be a useful tool in the follow-up of AK after shave biopsy and might be used in inconclusive clinical and dermoscopic presentations of lesions after surgery or other treatment modalities.