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**Reflectance confocal microscopy in the diagnosis of vesicobullous disorders: case series with pathologic and cytologic correlation and literature review.**

*Lacarrubba F, Verzi AE, Pippione M, Micali G. Skin Res Technol. 2016 Jun 4. doi: 10.1111/srt.12289.*

### **ABSTRACT**

**BACKGROUND:** Vesicobullous disorders are characterized by intraepidermal or subepidermal blistering resulting from different pathogenetic mechanisms. The diagnosis is generally based on clinical examination and semi-invasive/invasive procedures such as cytology and histopathology. In vivo reflectance confocal microscopy (RCM) is a non-invasive technique for real-time, en face imaging of the epidermis and upper dermis with high resolution close to conventional histopathology. **PURPOSE:** To evaluate RCM features of different vesicobullous diseases and correlate with cytologic and histopathologic examination. **METHODS:** Ten patients (6M/4F, age range: 9-81 years) affected by blistering diseases, such as herpes simplex, herpes zoster, Kaposi's varicelliform eruption, pemphigus vulgaris, Hailey-Hailey disease, bullous pemphigoid, and porphyria cutanea tarda were evaluated using a handheld RCM device. **RESULTS:** In our study, a clear correlation between RCM and Tzanck's test and/or histopathology was observed. RCM allowed in all cases an easy identification of the blister spaces and of the split levels, and in some cases specific features were detected, such as giant keratinocytes in herpes infections and acantholytic cells in pemphigus vulgaris and Hailey-Hailey disease. **CONCLUSION:** Reflectance confocal microscopy may support the clinical diagnosis of vesicobullous disorders and indicate to the physician the appropriate patient management and/or the need for further investigation. © 2016 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd. **KEYWORDS:** Hailey-Hailey disease; bullous pemphigoid; herpes; pemphigus; porphyria cutanea tarda; reflectance confocal microscopy PMID:27259839