**ABSTRACT**

**BACKGROUND:** Differentiation between seborrheic keratosis (SK) and skin cancers may be difficult. Reflectance confocal microscopy (RCM) enables noninvasive assessment of skin neoplasms at cellular-level resolution. **OBJECTIVE:** We sought to describe RCM features of SK and to correlate these RCM findings with dermoscopic structures. **METHODS:** Clinical, dermoscopic, and RCM images of 45 consecutive SK were obtained at a private and university dermatology clinic. Fourteen SK were biopsied because of equivocal clinical or dermoscopic features. **RESULTS:** With RCM, all SK displayed a regular honeycomb pattern of the epidermis and densely packed, round to polymorphous, well-circumscribed dermal papillae at the dermoepidermal junction, features suggestive of a benign neoplasm. RCM features indicating the diagnosis of SK were also observed, including epidermal projections (43/45 SK; 96%) and keratin-filled invaginations (36/45 SK; 80%) at the lesion surface; corneal pseudocysts at epidermal layers (19/45 SK; 42%); and melanophages (21/45 SK; 47%) and dilated round and linear blood vessels (21/45 SK; 47%) in the papillary dermis. Of biopsied SK, 93% (13/14) displayed at least 3 characteristic RCM findings in the absence of RCM features suggestive of malignancy. **LIMITATIONS:** This was a limited study sample and retrospective study design. **CONCLUSIONS:** SK display a distinct set of RCM criteria despite their variable clinical and dermoscopic appearances.