

## Journal Article Review

# A Descriptive Review of Characteristics of Retinoschisis, Retinal Detachment, and Schisis Detachments

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### Purpose

Retinoschisis (RS) is a peripheral lesion in the posterior segment where retinal layers become separated from one another, while retinal detachments (RDs) present with a variety of characteristics, many of which can be mistaken as RS. This study utilizes the SPECTRALIS® Ultra-Widefield Angiography Module (102°) to obtain high quality, non-contact images that allow clinicians to classify peripheral lesions as RS, RD, or a combination of both.

### Methods

This study included 14 eyes of 14 patients (ages 28-89, mean: 61 years) with primary RS, RD, or a combination of both. Patients with other primary pathology such as trauma or inflammation were not included. All images were acquired with the SPECTRALIS HRA+OCT using the ultra-widefield 102° lens in infrared mode and a minimum automatic real-time tracking (ART) value of 15.

### Discussion

Of the 14 eyes, 7 were diagnosed as having rhegmatogenous RD (3 RDs included the macula), 4 eyes had RS, and 3 eyes had a combination of RS/RD. This cohort of eyes included 8 with cataracts of varying degrees, 2 with posterior chamber intraocular lens implants, 1 with a mild vitreous hemorrhage, and 7 with posterior vitreous detachments. Despite these additional factors, imaging was successful in all 14 eyes.

RDs clearly appeared dark and opaque, and any associated retinal tears appeared lighter amidst the darkened tissue. In contrast, RS appeared with sharply defined borders, were light and translucent in nature, and exhibited overlying vasculature that was exaggerated and in sharp focus. The two different types of lesions were easily and quickly identified in each case.

### Conclusions

Retinoschisis, retinal detachments, and combinations of the two can be identified and distinguished from one another with the use of the SPECTRALIS non-contact, 102° ultra-widefield lens in infrared mode. Due to automatic real-time tracking and image averaging, the usual confounding imaging factors such as cataract and poor patient fixation did not reduce the quality of the images, permitting analysis of these eyes. Since the full extent of the lesion can be visualized with the infrared wavelength, these images can be used to monitor progression and educate patients on the different pathologies.