

**Table 2-1***Troubleshooting While Scanning*

<b>Problem</b>	<b>Likely Causes</b>	<b>Solutions</b>
Overall poor quality signal	Scan alignment	Adjust scan head/lens positioning
	Focus	Adjust focus setting
	Polarization	Adjust polarization setting
	Small pupils	Seek dilation orders
	Corneal drying	Instill artificial tears, instruct the patient to blink normally until he or she is asked to keep his or her eyes open
	Cataracts or IOL implant	Adjust scan head/lens positioning, focus, and polarization to optimize the signal
	Dirty lens	Clean lens using the procedures outlined in Chapter 1
Signal deteriorates progressively between blinks	Dry eyes	Have the patient blink several times, instill artificial tears, or sit with his or her eyes gently closed for 5 minutes
Signal slowly deteriorates	Lid droop	Instruct the patient to keep his or her eyes wide open between his or her blinks; help the patient to remain alert if he or she is falling asleep
	Head position drift	Reposition the patient, explain the need to remain in the position. In some cases, a coworker or family member can assist the patient to maintain head position
Poor signal quality at the side of the image	Start or end of the scanning path is hitting the pupillary edge	Adjust scan head/lens positioning, seek dilation orders
Poor signal quality in the middle of the image (linear/raster scan)	Media opacity (eg, localized corneal opacity, floaters)	Adjust scan head/lens positioning, seek dilation orders
Poor signal quality in the middle of the image (circular scan)	Scan alignment	Adjust scan head/lens positioning, seek dilation orders
High variability in z-offset or excessively curvy retina	Scan alignment	Adjust scan head/lens positioning, seek dilation orders
Missing section of a scan	Patient blinked	Give clear instruction for when to stop blinking and hold the eye wide open in between blinking
	Floater blocking signal	Adjust scan head/lens positioning to avoid the floater. If this fails, ask the patient to look away and look back at the fixation spot. This may cause the floater to reposition in a less visible location

*(continued)*

## Summary

In this chapter, 3 major image features that are essential to assess OCT image quality are discussed. Please see Tables 2-1 and 2-2, which summarize the problems/causes/solutions discussed in this chapter as well as some minor problems that are not discussed in the text.

## Reference

- Stein DM, Wollstein G, Ishikawa H, Hertzmark E, Noecker RJ, Schuman JS. Effect of corneal drying on optical coherence tomography. *Ophthalmology*. 2006;113(6):985-991.