Following removal of the anterior stroma, OCT images can be used to assess thickness of the residual stromal bed, a task that is more difficult to ascertain with the usual en face microscope perspective (Figure 8-2). This can be particularly useful in cases with decreased visualization (Video 8-2), such as a stromal scar or stromal emphysema (Figure 8-3), as well as in severely ectatic keratoconic eyes with significant apical thinning and a higher perforation risk. It may also be useful in the Jacob modified technique of primary management of acute hydrops with pre-Descemet DALK (described in detail elsewhere in this book) to determine depth of dissection through the edematous hydrops tissue.14,15

A critical step in DALK surgery is attaining a deep stromal tunnel prior to attempting a big bubble air injection. Regardless of whether the big bubble is