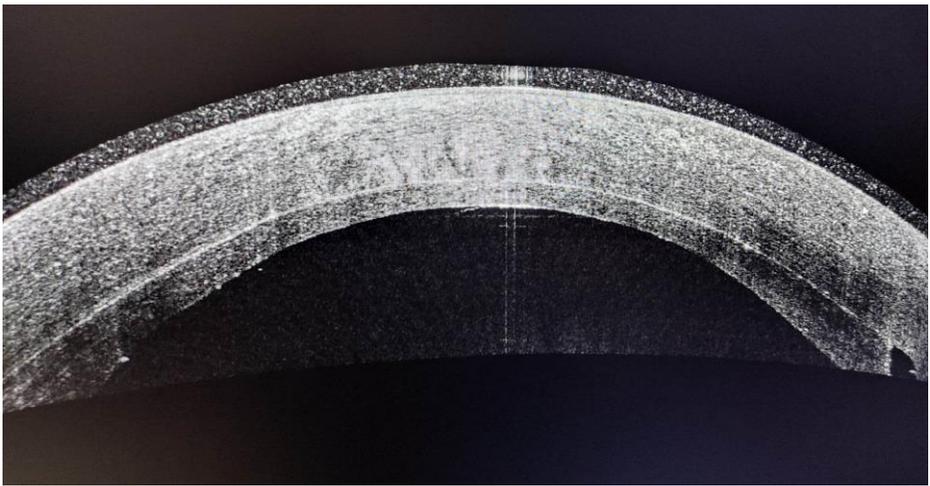


Interface fluid after
uneventful DSAEK:

The role of intraoperative
OCT



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Financial Disclosure

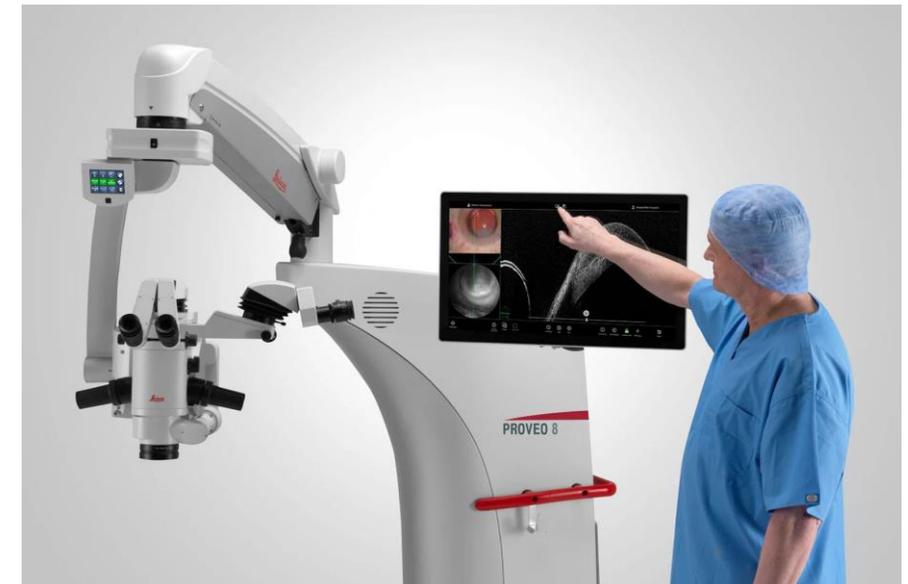
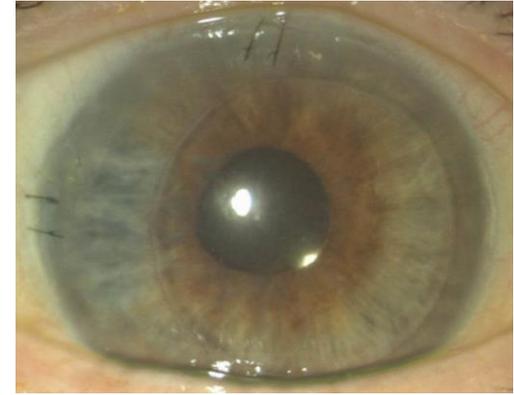
No financial interest in any of the products mentioned in the study

No conflict of interest



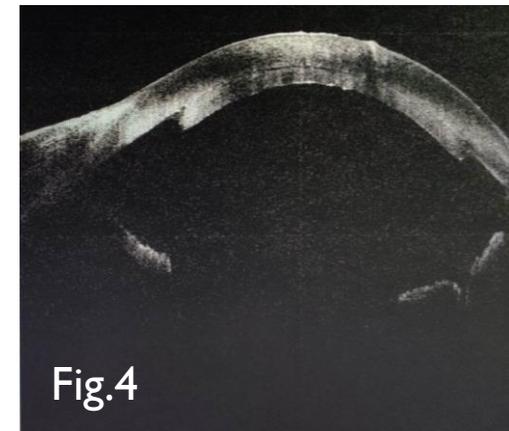
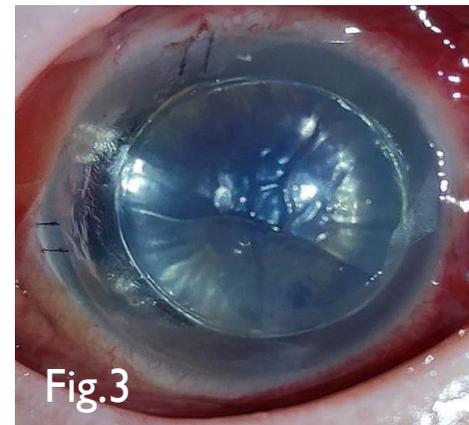
Purpose

- To report an interesting case of interface fluid after uneventful DSAEK
- To highlight the role of intraoperative Optical Coherence Tomography in the detection of similar cases



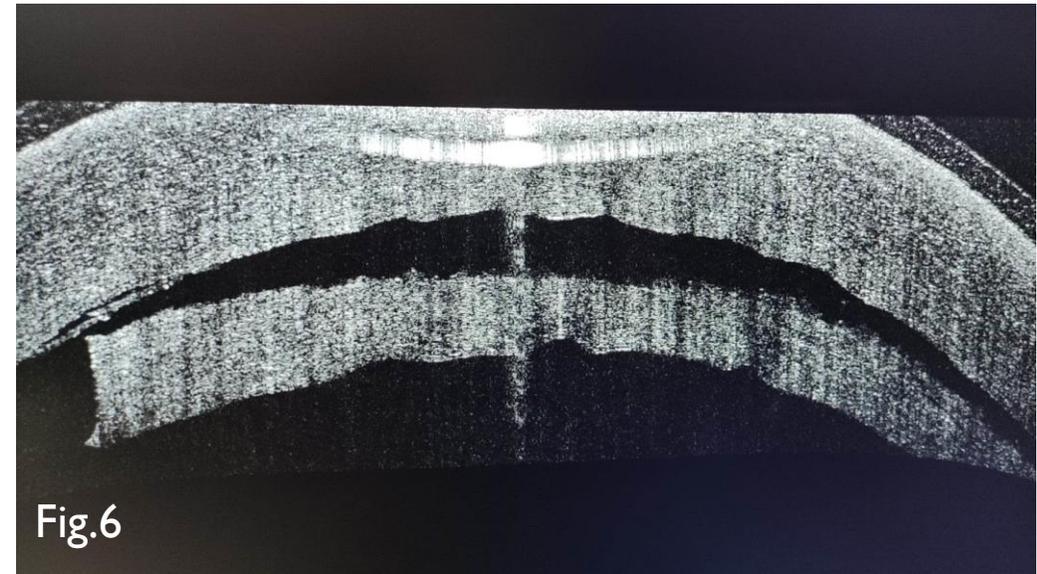
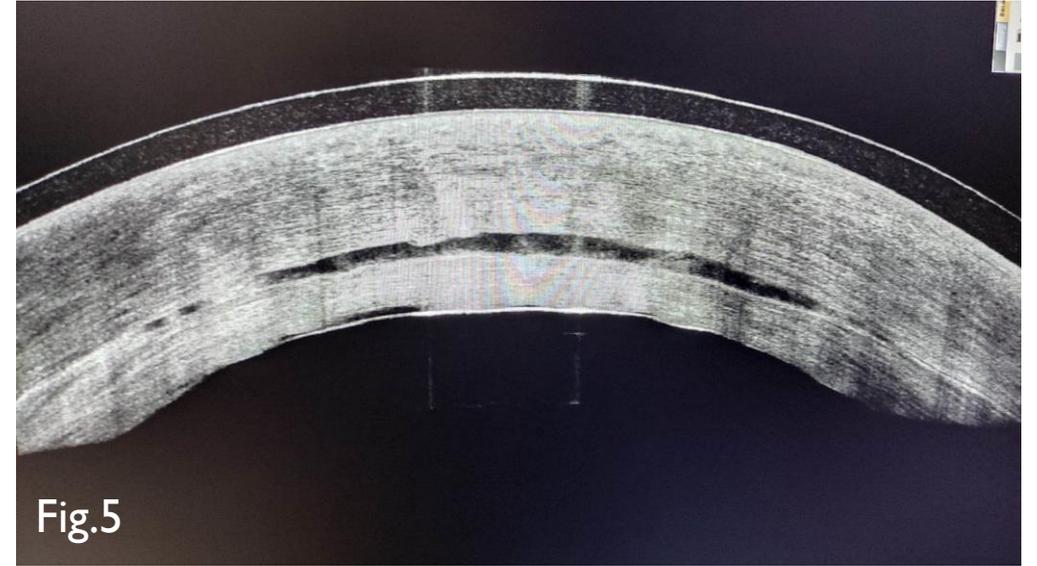
Case

- A 68-year-old female suffering from pseudophakic bullous keratopathy in her right eye (BCVA=20/400) underwent uneventful DSAEK (Fig.1)
- During surgery, the intraoperative OCT depicted a slight accumulation of fluid in the central interface between host and graft (Fig.2)
- The interface fluid did not resolve completely after a full anterior chamber fill with air and subsequent massaging on the corneal surface(Fig.3-4)



Clinical course

- On the first 2 postoperative days, the central interface fluid remained stable in OCT examination, while the peripheral graft was 360° attached (Fig.5)
- Five days after surgery the patient reported a further decrease in her vision and the examination revealed a complete detachment and dislocation of the graft in the inferior anterior chamber (Fig.6)



Re-bubbling...

- The graft was surgically repositioned on the same day and kept in place with an 80% anterior chamber fill with air (Fig.7)
- Upon rebubbling, no interface fluid was noted in the intraoperative OCT. (Fig.8)
- The graft remained attached with an uneventful postoperative course and her BCVA increased to 20/100 and 20/30, 1 week and 3 months after surgery, without any other adverse events (Fig.9-10)



Fig.8

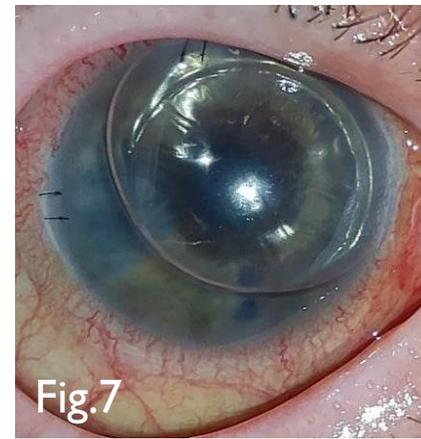


Fig.7

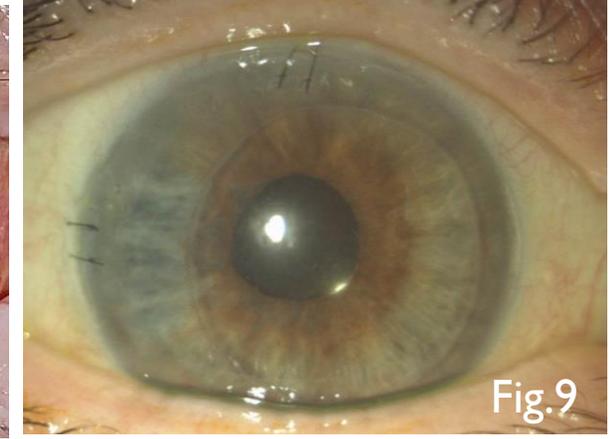


Fig.9

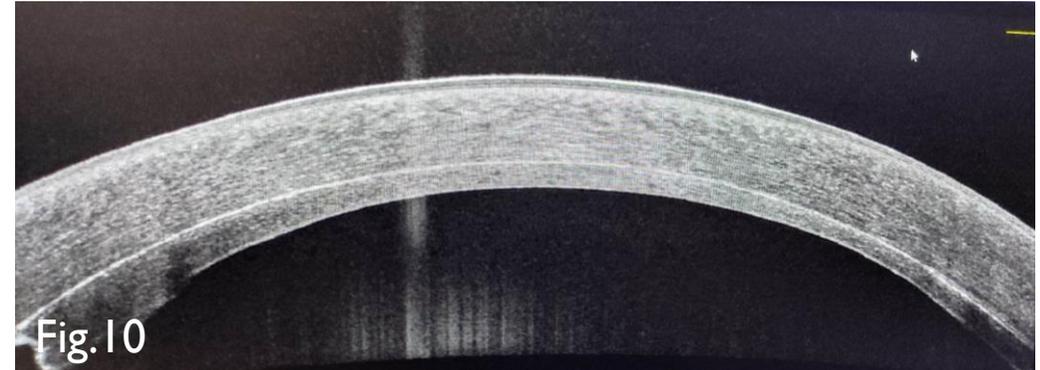


Fig.10



Conclusion

- Intraoperative OCT is a useful tool in detecting interface fluid and other complications during endothelial keratoplasty.
- Its application could reduce the rate of graft detachment and the need for further interventions, which could jeopardize the viability of the graft.

