Are there filtering blebs after canaloplasty?
T. Klink, E. Panidou, B. Kanzow-Terai, J. Klink, G. Schlunck, F. Grehn
Department of Ophthalmology, University Hospital Wuerzburg, Germany

Purpose: Aim of the study was to investigate eyes for the development of filtering blebs after canaloplasty.

Methods: 20 eyes of 20 consecutive patients after receiving canaloplasty were included. The eyes were examined clinically (slitlamp), with anterior segment optical coherence tomography (AS-OCT) and high frequency ultrasound biomicroscopy (UBM) for the presence of filtering blebs. IOP and medication were recorded pre- and postoperatively. Suture tension (tension grade = TG) was measured by UBM. Two success criteria were defined: 1) IOP ≤ 21 mmHg + min. 20% IOP-reduction and 2) IOP < 18 mmHg without medication respectively.

Results: The mean IOP decreased significantly from 22.15 ± 9.5 mmHg preoperatively to 13.3 ± 9.9 mmHg at last follow-up. The number of medications was reduced significantly from 3.15 ± 1.2 preoperatively to 0.55 ± 0.94 postoperatively. The mean follow-up was 245 ± 120.0 days. Complete success was 65% for both success criteria. Clinically no filtering blebs were detected. In AS-OCT and UBM in one patient a filtering bleb-like structure was revealed. The mean TG was 1.49 ± 0.38. There was no significant difference in TG between the success and the failure group.

Conclusions: The development of filtering blebs after canaloplasty seems to occur rarely. Canaloplasty success appears to be independent of subconjunctival aqueous drainage.