

Virtual reality becoming reality

Author: Martina Zavorkova, Usti Nad Labem, Czech Republic

Advantages:

Presentation of beginner's personal experiences with training pars plana vitrectomy in virtual reality and following transfer into reality.

Methods:

In The Czech Republic training of retinal surgeons was possible only using artificial or cadaverous eyes until 2006. Nowadays beginners may do the first steps of vitrectomy in the Prague Centre of Virtual Ophthalmosurgery. There I started my surgical carrier virtually. One month later I was transferred from virtual reality into reality. The film presents comparison of videos from virtual training and videos from real vitrectomy. The videos show navigation, vitrector training, forceps training, posterior hyaloid removal, and peeling of internal limiting membrane.

Effectiveness / Safety:

Application of EYESI simulator instructions for retinal surgeons makes learning more effective. Using this simulator results in the reduction of surgeon's stress. For patients it means a greater level of safety.

Take home message:

Virtual training helps not only to improve beginner's surgery skills but also training of new operation methods.