

Primary pars plana vitrectomy without an encircling band for rhegmatogenous retinal detachment

Authors: Silvia Bopp, Klaus Lucke, Bremen, Germany

Advantages:

Primary vitrectomy without additional buckle is equal effective and the more patient-oriented method.

Methods:

The conventional approach to retinal detachment includes vitrectomy in combination with scleral buckling and is considered safe and effective. Major disadvantages are a myopic refractive shift and binocular disturbance for the patient. Furthermore, recent techniques, such as small-gauge techniques, are not compatible with this technique. Our concept in vitrectomy without scleral buckling for RRD includes an aggressive approach to the vitreous base. Following tools are mandatory: As the natural lens may be an obstacle to anterior vitrectomy, we frequently combine primary vitrectomy with phaco/IOL. Furthermore, extensive scleral indentation is essential and can be performed under microscope view or using wide-angle optics. Adjustments of the vitrectomy machine parameters allow thorough vitreous removal with minor risk of iatrogenic tears. The technique and impact on clinical results are demonstrated.

Effectiveness / Safety:

Primary anatomic success is achieved in 93% of cases and cataract formation affording subsequent surgery is no issue any more.

Take home message:

Radical vitrectomy of the vitreous base facilitates high primary reattachment rates. Simultaneous lens surgery to get proper access to the vitreous base is mandatory in most phakic eyes.