

Primary vitrectomy without scleral buckling, for management of uncomplicated retinal detachment

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Advantages:

Primary vitrectomy detect all retinal breaks, directly relieves traction on retinal breaks, removes attached posterior cortical vitreous, smoothly attach the retina through PFCL injection and provides internal tamponade with air or gas for all retinal breaks. Primary vitrectomy avoids all the disadvantages of scleral buckling including globe distortion, induced myopia & astigmatism, late extrusion or intrusion. It also avoids complications of external drainage of subretinal fluid including subretinal hemorrhage.

Methods:

50 eyes with uncomplicated rhegmatogenous retinal detachment underwent primary vitrectomy, without scleral buckling: 13 eyes were phakic and 37 eyes were or were rendered pseudophakic. The retina could be completely attached at the end of the operation without operative complications. All phakic eyes needed later phacoemulsification and IOL implantation, 6 - 18 months following the primary operation. The retina could be attached in all eyes following one operation. Follow up ranged from 6 months to 3 years

Effectiveness / Safety:

Apart from the development of cataract in phakic eyes, primary vitrectomy without scleral buckling is safe and effective in achieving retinal reattachment in uncomplicated rhegmatogenous retinal detachment.

Take home message:

Because of the recent advances in vitreoretinal surgery including the small gauge transconjunctival sutureless vitrectomy, primary vitrectomy can replace scleral buckling in management uncomplicated cases of rhegmatogenous retinal detachment.