

# SCLERAL BUCKLING AS A REFRACTIVE SURGERY IN MACULA-ON RHEGMATOGENOUS RETINAL DETACHMENT: A CASE REPORT

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#### **PURPOSE**

We aim to report a case of a pseudophakic patient with residual refractive error in rigth eye (OD) after cataract surgery that was undergoing scleral buckling (SB) surgery combined with pars plana vitrectomy (PPV) for the repair of macula-on rhegmatogenous retinal detachment (RRD).

## METHODS

The case report was elaborated from the analysis of medical records of one reference hospital in Belo Horizonte / MG.

## CASE REPORT

A 65-year-old man presented for medical appointment to cataract surgery evaluation. The patient reported that visual acuity of left eye (OS) is worse since childhood because of possible refractive amblyopia. Vision was 20/30 in OD and 20/80 OS. Anterior segment exam revealed an early to moderate nuclear sclerotic in both eyes (OU). Fundus examination of OU was unremarkable.

	AL (mm)	
	OD	OS
Before	24,47	23,69
After	24,99	
Δ	0,52	

Axial length (AL) of eyes before and after surgery procedure on OD

His best corrected visual acuity (BCVA) was 20/30 in OU postoperative, but with a residual refractive error of +1,25 diopters in his OD. Three months after cataract surgery, the patient presented with macula-on RRD in his OD at emergency consultation.

The surgeon decided to combine SB to PPV surgery to benefit from its shifts in refraction by globe indentation, inducing myopia from elongation of AL. After this surgery procedure, not only anatomical success was achieved, but also refractive error compensation. The patient presented an AL of 24,99 mm and his final BCVA in OD was 20/25 with -0,50 diopters.

## DISCUSSION

Although SB popularity appears to have declined, AL changes following encirclement has previously been established and remains clinically important.

We report a case of macula-on RRD with residual refractive error after cataract surgery that prompted us to perform SB surgery combined with PPV. SB surgery was chosen in this case to benefit from its elongation of AL to achieve a better final refractive outcome compensation residual refractive error successfully.

#### REFERENCE

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