

# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

Boris J Bajaire Gómez, MD

Milena Romero Ibarra, MD

Bogota, Colombia

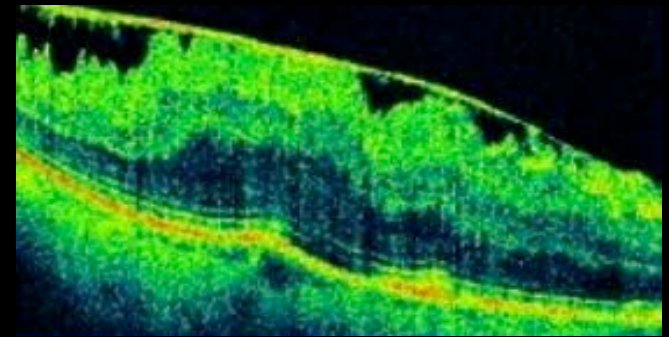
July 14, 2015

There is no commercial interest

# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

## CONCEPTS

- Removal of the ILM eliminate all components involved in the ERM and Macular Hole.
- ILM is translucent, so the use of dyes that make visible allow a safe way and a complete removal.



# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

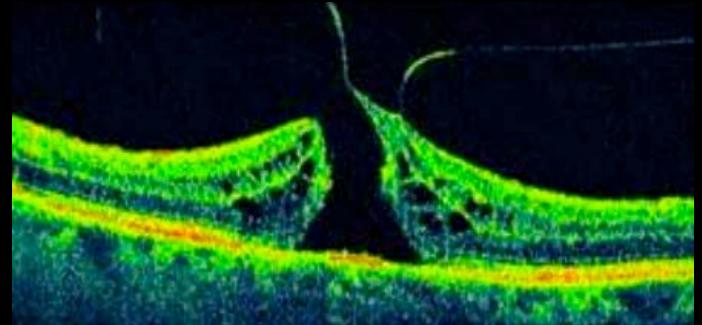
## OBJECTIVES

- Demonstrate the complications rate.
- Establish Macular hole closure without face down position.
- Identify improvement in visual acuity.
- Determine macular thickness by OCT.

# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

## MATERIALS AND METHODS

- Inclusion criteria: ERM patient, Idiopathic Macular Hole with tracking.
- Exclusion criteria: patients with Macular Hole over 1 year of evolution, associated ocular pathology.



# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

## MATERIALS AND METHODS

- Descriptive study
- Total population 83 patients, 50 women (60.2%), 33 men (39.8%).
- Epiretinal membrane 52 patients ( 62%)
- Macular Hole 31 patients (37,4 %)
- 23 G Vitrectomy and Membrane peeling with Brilliant blue G, Trypan blue and PEG 4%.
- Snellen visual acuity before surgery and 3 months after procedure.
- Cirrus tomograph HD 5000, before and after surgery.

# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

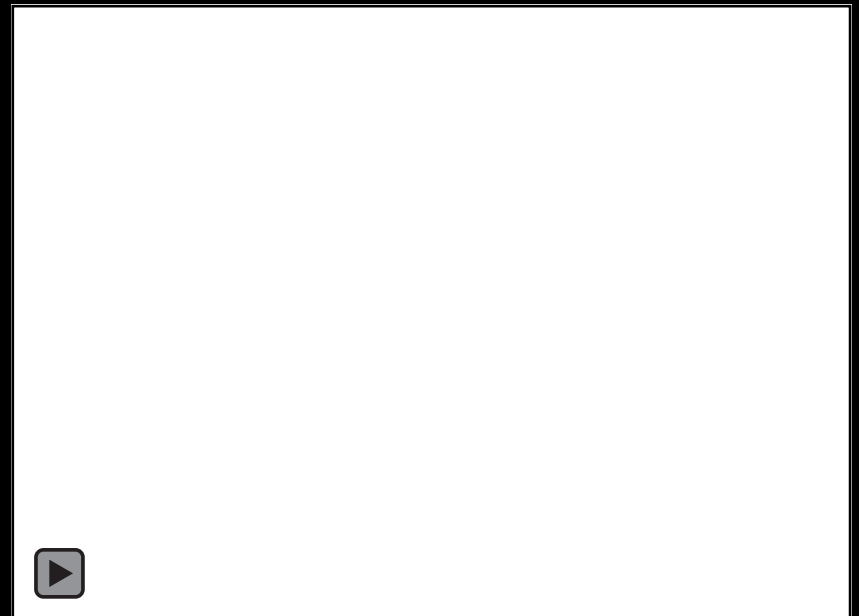
## STATISTICAL ANALYSIS AND RESULTS

- Visual acuity before surgery and 3 months
- OCT before and after finding visual acuity improved in 36 patients (43.4%) vs 33 patients (39.8%).
- Improved control the OCT in 60 patients (72.3%) showed reduction of 69 microns and unchanged in only 3.6% of patients screened.
- Macular hole closure was 93,54 %.

# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

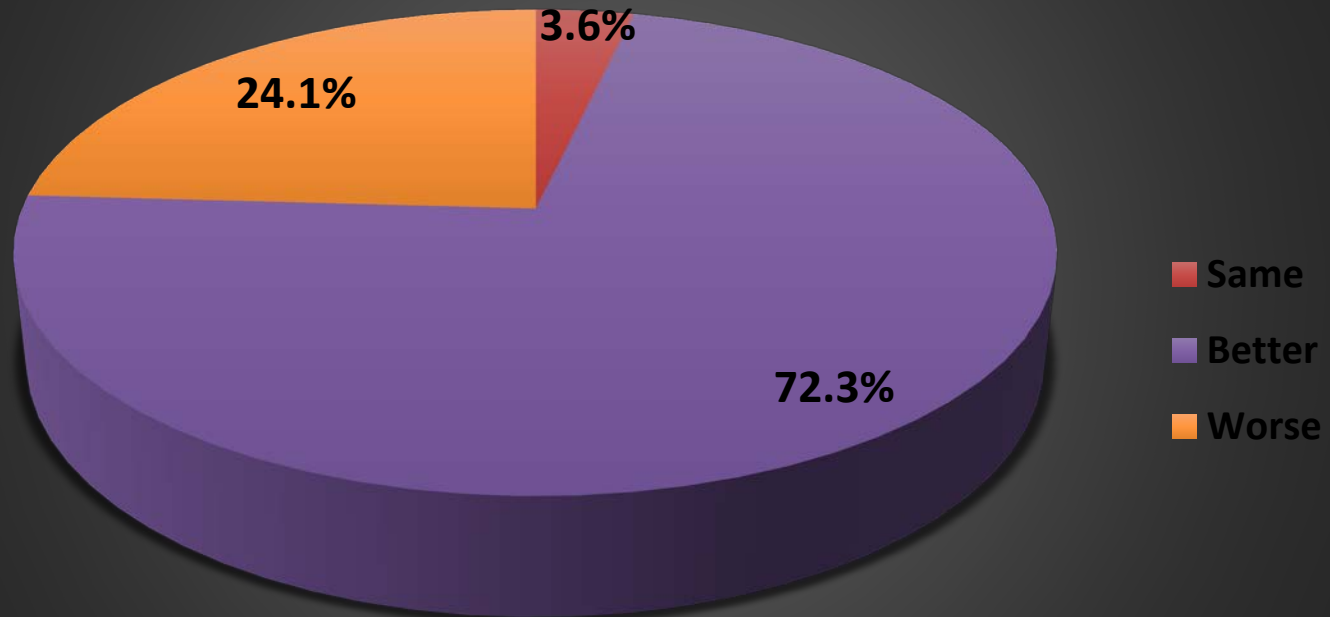
## SURGERY

- 23G posterior vitrectomy
- Staining of the posterior pole
- ERM peeling
- second staining
- LIM peeling
- Application of gas (Macular Hole)
- Patient without prone position



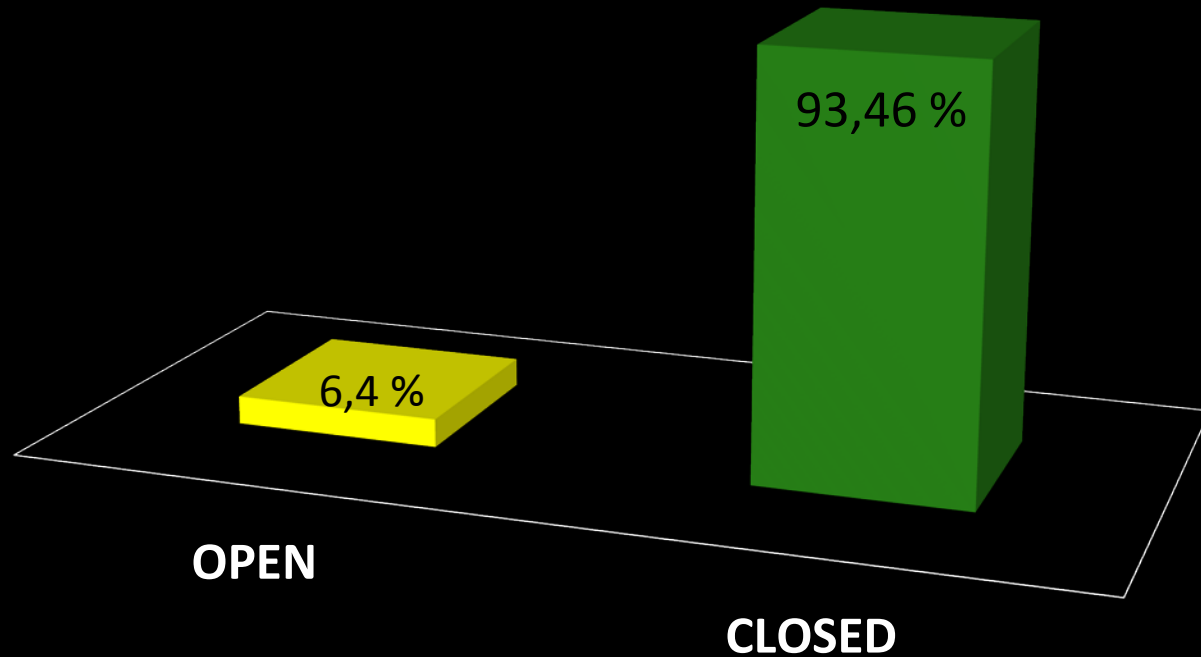
# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

OCT POST OPERATIVE VITRECTOMY WITH ERM REMOVAL



# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

## MACULAR HOLE

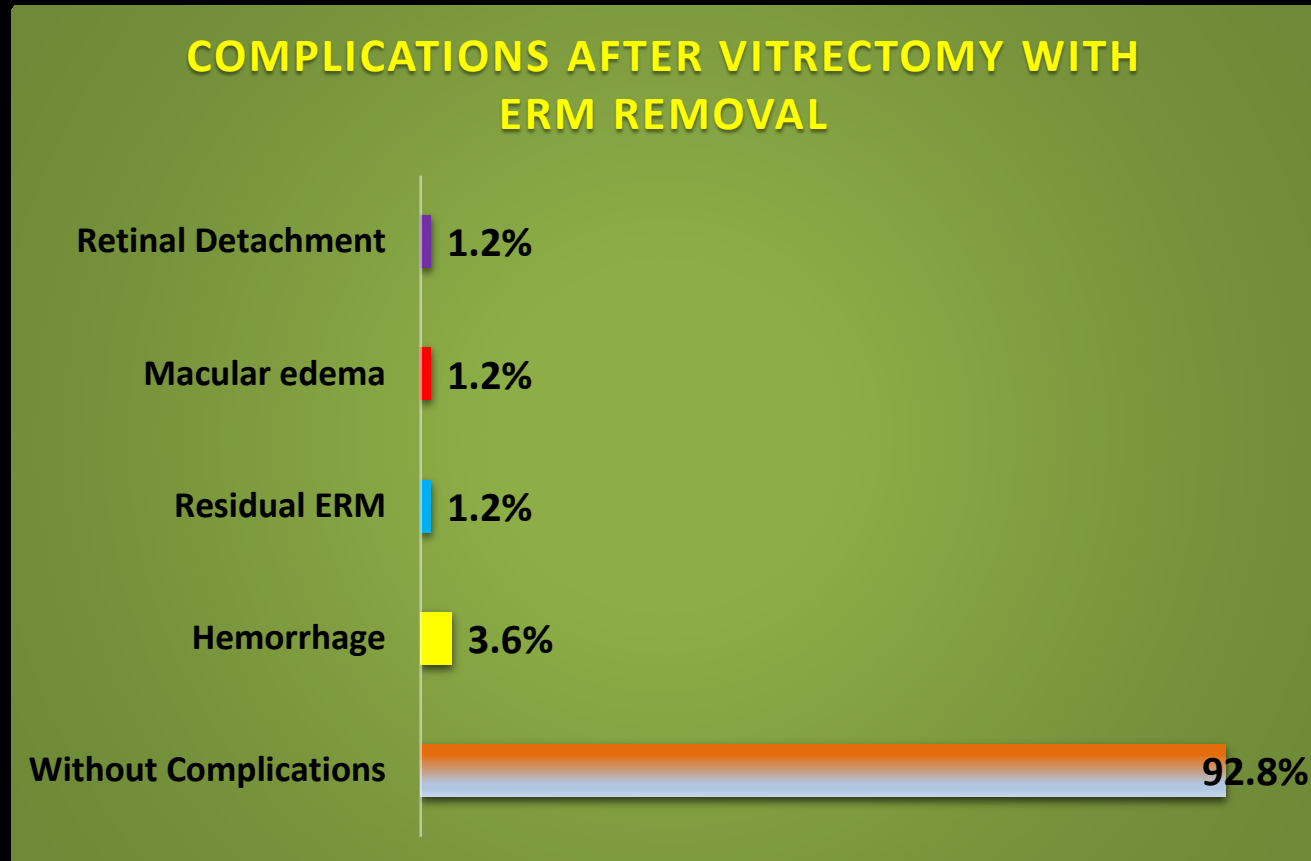


# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

## STATISTICAL ANALYSIS AND RESULTS

- Using blue dual membrane reduces the number of complications in 92.8%.
- A bivariate analysis using Chi2 test and Fisher exact test, absence of complications ( $p = 0.007$ ) was observed.

# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position



# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position

## CONCLUSIONS

- The brilliant blue G, Trypan blue and 4% PEG is nontoxic and safe substance that provides adequate staining, allows the removal of the epiretinal membrane and internal limiting membrane with an anatomical and functional outcome favorable, with an important decreased complications high safety profile.
- Longer follow-up is needed to establish final visual acuity.

# Results of Using Membrane Blue Dual in Epiretinal Membrane and Macular Hole Surgery Without Face Down Position



Thanks !