

Severe Vision Loss After Vitrectomy: Rates in RD vs FTMH Surgery

Incidence Rates of Severe Vision Loss after Pars Plana Vitrectomy for Retinal Detachment and Full Thickness Macular Hole

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BACKGROUND

Severe Vision Loss (SVL)

- An important metric in cataract surgery
- Rates post-cataract surgery reported at 1 in 2000

Post-Vitrectomy

- Rates have not been clearly elucidated
- Outcomes conventionally measured with best corrected visual acuity (BCVA)
- Does not quantify extent of diminished vision in patients post-operatively

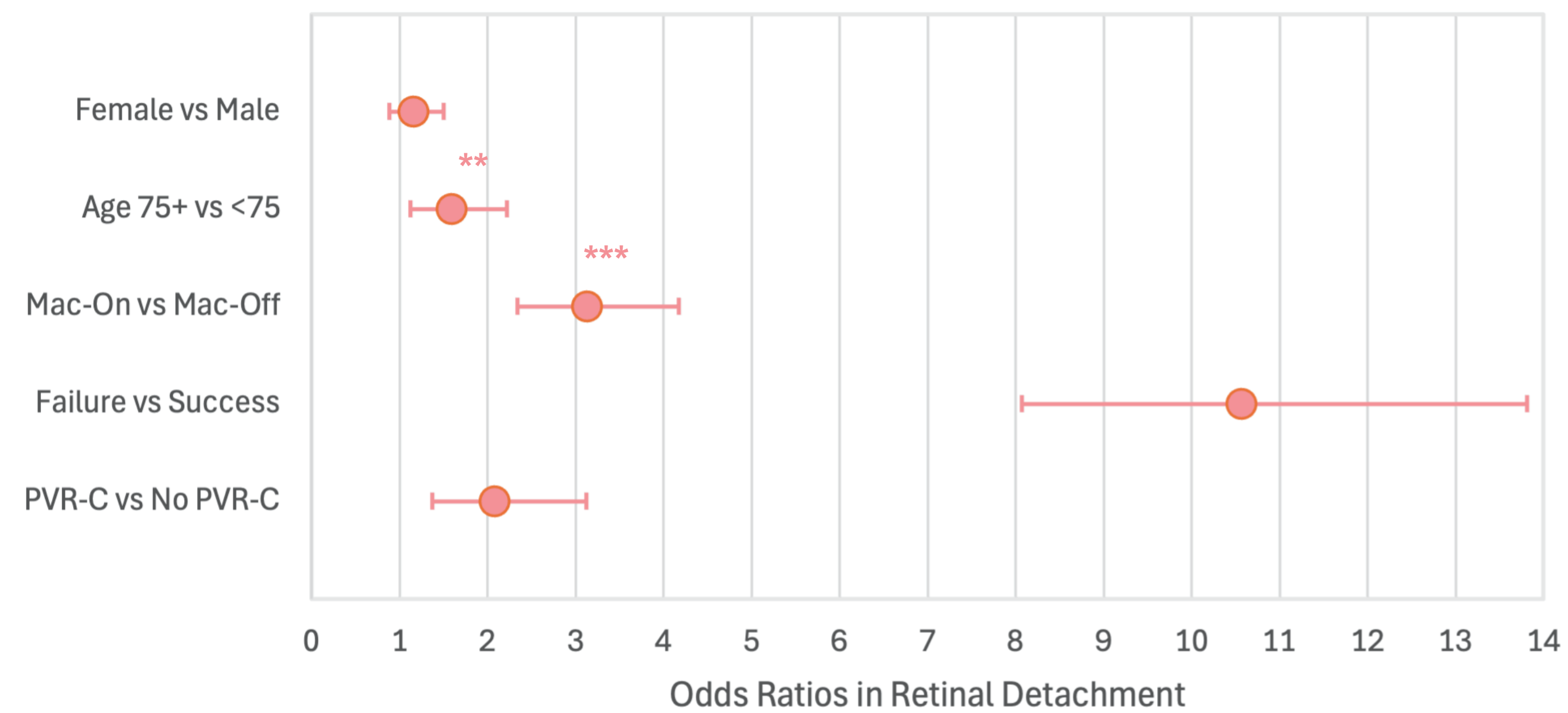
Severe vision loss was defined as loss of > 0.6 logMAR

Methods

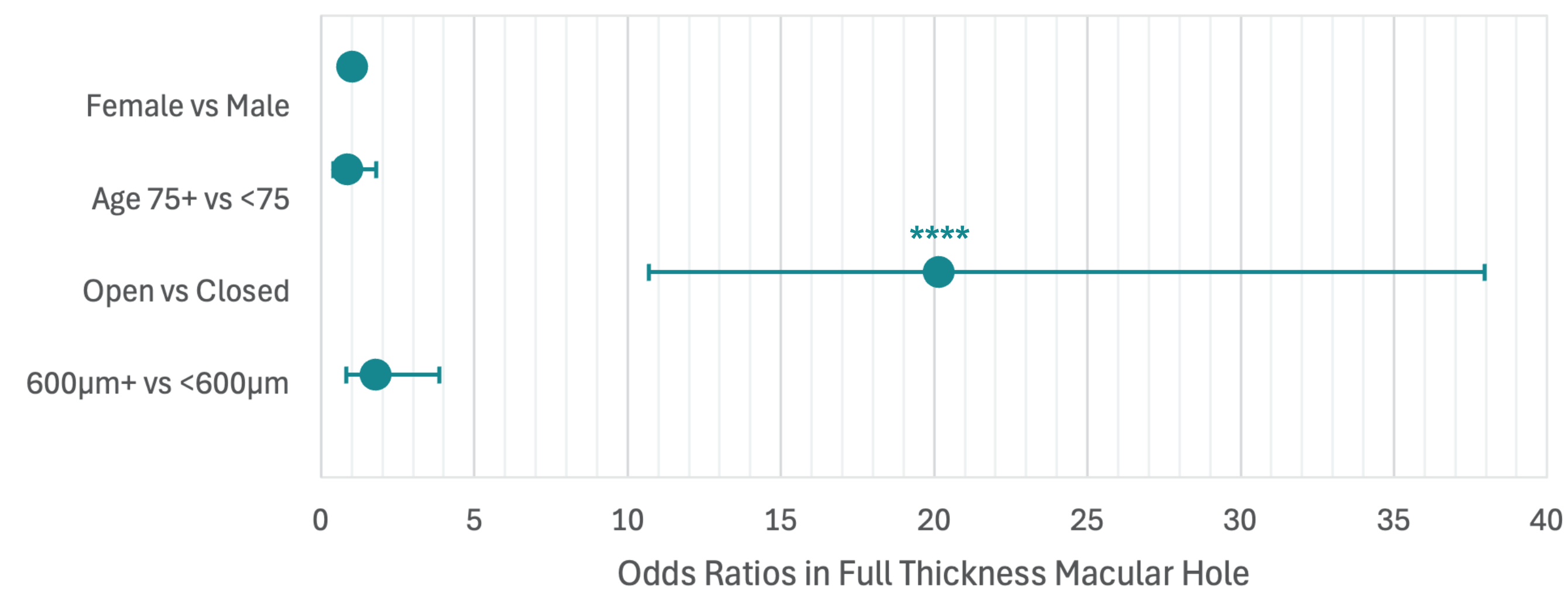
- Epidemiological retrospective analysis of patient visual outcomes after pars plana vitrectomy
- Collected from data on BEAVRS vitreoretinal database
- Total 8203 cases of retinal detachment and 4959 cases of full thickness macular hole repairs

	SVL	No SVL
Retinal Detachment (RD)	2.82% n = 232	97% n = 7971
Full Thickness Macular Hole (FTMH)	0.83% n = 41	99% n = 4918

Retinal Detachment



Full Thickness Macular Hole



Key Takeaways

Retinal detachment patients have a **2.82%** risk of SVL post-op

Full thickness macular hole patients have a **0.83%** risk of SVL post-op

Application into Clinical Practice

1. Surgeons may use the data to inform their consent process and discuss the incidence risks of SVL to patients
2. Further consensus is required to benchmark SVL to enable effective research into complication rates and outcomes

Food for Thought

- Patients at counting fingers (CF) or hand movements (HM) are at limited capacity to worsen in visual acuity
- Future analyses may benefit from including patients with very low postoperative visual acuity (CF/ HM) and considering outcomes based on "poor post-operative vision"