

Cyclodiode Review

April 21-April 23 Data

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Background

1) How effective is cyclodiode at protecting vision?

Literature: Success 26% at 24m
>20% reduction IOP to 6-18mmHg with same/fewer medications and no loss of vision >2 lines

2) How effective is cyclodiode at reducing IOP and medications?

Literature:
IOP 45.1% reduction
Diamox Stopped 77.4%

Methodology

Retrospective Audit using Medisight
April 21 to April 23 (to aim 24m FU)

220 Cases
-158 removing duplicates and missing data
-11 Exclude N/A (previous diode or LTFU early)

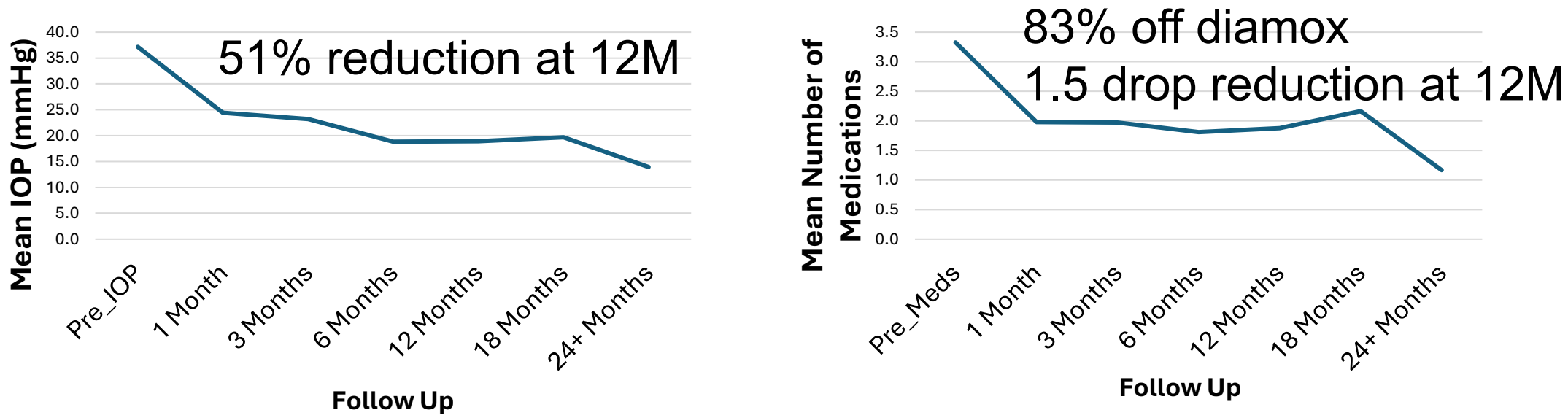
= 51 for analysis (1st Cyclodiode with at least 12m FU)
Mostly refractory with poor visual potential

Results 1: Protecting Vision

Initial Success 16/51 = 31% >12M
Failure 36/51 = 69%

In cases of failure
1st Repeat diode success 6/24 = 25%, 2nd Repeat 1/7 = 15%
But FU often limited in these cases

Results 2: Reducing IOP and medications



Compromised Data:
- 25 had repeat cyclodiode
- 4 had filtration surgery
- Follow up drops to about 1/3 by 24 months

CYCLODIODE SUMMARY for N=51

Reasonable **success rate of 31%** - likely higher with repeats, optimised settings (Slow Burn) and glaucoma type

Acceptable safety profile: 2% LOV and no cases of CMO or hypotony (Slow Burn)

Effective at **reducing IOP AND medication burden** even when ‘failure’– Overall Diamox stopped 15/18 = 83%

Slow Burn
Duration 3.5-4.5s,
Power 1250-1500mv

Safety Outcomes

IOP failure +/- glaucoma progression 65%
Loss of vision 2%
Hypotony 0%
Uveitis 0%
Cornea oedema 0%

(Notably lower rates than literature)
LOV 0-8% from CMO
Persistent hypotony 0-8%

1 case VA loss due to diode:
End Stage POAG seems VA loss from diode at 1m 6/12 to 6/24 (D2000, P1500, J54)

1 case phthisis:
Rubeosis and 3x cyclodiode

1 case evisceration:
Rubeosis and 3x cyclodiode

Impact of laser settings

Laser Settings	Number Successes	Number Treated	% Success
Duration ≥ 3500ms (slow burn)	14	35	40%
Duration ≤ 2000ms (traditional)	2	16	12.5%

Impact of glaucoma type

Diagnosis	Number Successes	Number Treated	% Success
Rubeosis	4	22	18%
POAG	5	10	50%
Trauma	2	6	30%
Other	4	12	30%

Even in cases of ‘failure’...

