The effects of dorzolamide 2% and dorzolamide/timolol fixed combination on retinal and optic nerve head blood flow in primary open-angle glaucoma patients

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We have found errors within the Results heading of the abstract and in Table 2 and 3.

The correct abstract is shown below:

Purpose To compare the effect of dorzolamide hydrochloride 2%, timolol maleate 0.5%, and their fixed combination on intraocular pressure (IOP) and retinal and optic nerve head haemodynamics in primary open-angle glaucoma patients.

Methods Twenty-eight patients with early-moderate glaucomatous damage treated with β -blockers (>6 months) with IOP values ranging from 18 to 22 mmHg at trough participated in this trial. After a 4-week washout period, patients were randomised in two groups: group I started with dorzolamide 2% monotherapy and group II with timolol 0.50% monotherapy for 4 weeks. After this period, both groups switched to dorzolamide/timolol fixed combination for 4 weeks. IOP, ocular diastolic perfusion pressure, heart rate, and Scanning Laser Doppler Flowmetry measurements at the

peripapillary retina and neuroretinal rim were taken at T0 (enrolment), T1 (wash out), T2 (monotherapy), and T3 (dorzolamide/timolol). Data were compared between different study times. Statistical analysis was conducted using a paired *t*-test.

Results Between T1 and T3, IOP decreased significantly in group I (−21.40%) ($P < 0.001$) and in group II (−21.25%) ($P < 0.001$). At the same time intervals, blood flow increased significantly at rim level for group I (+30.03%) ($P < 0.05$) and also when all patients were considered (rim +20.81%) ($P < 0.05$). Between T1 and T3, we also observed a significant increase of ODPP in group I (+7.24%) ($P < 0.01$) and in group II (+6.08%) ($P < 0.05$) and when all patients were considered (+6.71%) ($P < 0.001$).

Conclusions Dorzolamide/timolol fixed combination increased blood flow significantly at the neuroretinal rim showing a combination of hypotensive and haemodynamic effects.

The correct Table 2 is shown below.

The correct Table 3 is shown below.

We apologise for this mistake.

Table 2 IOP, ODPP, HR, BPd, BPs and flow data (mean $\pm$ SD) in the various study groups (group I, group II) and study times (T0, T1, T2, T3)

	T0			T1			T2			T3		
	Global	Group I	Group II	Global	Group I	Group II	Global	Group I	Group II	Global	Group I	Group II
IOP (mmHg)	18.47 $\pm$ 0.4	18.50 $\pm$ 0.45	18.45 $\pm$ 0.38	20.47 $\pm$ 0.42	20.56 $\pm$ 0.45	20.40 $\pm$ 0.41	17.89 $\pm$ 0.33	17.75 $\pm$ 0.29	18.00 $\pm$ 0.37	16.17 $\pm$ 0.42	16.19 $\pm$ 0.49	16.15 $\pm$ 0.37
ODPP (mmHg)	65.97 $\pm$ 1.89	65.45 $\pm$ 1.70	66.63 $\pm$ 2.21	62.39 $\pm$ 2.30	61.40 $\pm$ 1.85	63.63 $\pm$ 2.67	64.89 $\pm$ 1.62	64.15 $\pm$ 1.61	65.81 $\pm$ 1.55	66.58 $\pm$ 1.70	65.85 $\pm$ 1.75	67.50 $\pm$ 1.50
HR (b.p.m.)	72.50 $\pm$ 3.12	71.00 $\pm$ 2.61	74.38 $\pm$ 3.65	72.67 $\pm$ 2.91	70.50 $\pm$ 2.49	75.38 $\pm$ 3.21	71.39 $\pm$ 2.92	69.50 $\pm$ 1.85	73.75 $\pm$ 3.72	70.28 $\pm$ 3.03	67.00 $\pm$ 1.75	74.38 $\pm$ 3.12
BPd (mmHg)	84.44 $\pm$ 2.08	84.00 $\pm$ 2.89	85.00 $\pm$ 2.82	83.06 $\pm$ 2.29	82.00 $\pm$ 1.75	84.38 $\pm$ 2.80	82.78 $\pm$ 1.80	81.8 $\pm$ 1.6	83.75 $\pm$ 1.80	82.44 $\pm$ 2.09	80.7 $\pm$ 2.20	83.13 $\pm$ 2.28
BPs (mmHg)	126.36 $\pm$ 1.97	122.14 $\pm$ 2.53	118.21 $\pm$ 1.63	123.43 $\pm$ 2.01	120.35 $\pm$ 2.12	116.01 $\pm$ 1.82	122.83 $\pm$ 2.32	119.24 $\pm$ 1.72	116.23 $\pm$ 1.76	123.11 $\pm$ 1.02	118.90 $\pm$ 1.71	116.23 $\pm$ 1.91
Flow (temporal) (AU)	330.87 $\pm$ 89.78	343.11 $\pm$ 98.96	318.62 $\pm$ 78.86	343.84 $\pm$ 92.41	359.91 $\pm$ 97.51	327.77 $\pm$ 85.16	348.45 $\pm$ 152.48	361.71 $\pm$ 130.04	335.19 $\pm$ 172.61	400.46 $\pm$ 190.33	435.30 $\pm$ 177.93	365.63 $\pm$ 197.96
Flow (nasal) (AU)	292.96 $\pm$ 92.05	307.60 $\pm$ 90.51	278.32 $\pm$ 92.32	299.99 $\pm$ 84.64	305.38 $\pm$ 83.15	294.60 $\pm$ 86.77	324.11 $\pm$ 158.03	343.10 $\pm$ 138.00	305.13 $\pm$ 175.42	339.18 $\pm$ 149.32	384.65 $\pm$ 158.65	293.71 $\pm$ 126.20
Flow (rim) (AU)	287.08 $\pm$ 71.88	293.79 $\pm$ 66.26	280.37 $\pm$ 77.31	300.08 $\pm$ 69.51	300.97 $\pm$ 71.96	299.19 $\pm$ 67.84	332.86 $\pm$ 134.97	336.78 $\pm$ 115.07	328.96 $\pm$ 153.64	362.53 $\pm$ 150.38	391.35 $\pm$ 155.62	333.71 $\pm$ 140.92

Flow data (mean $\pm$ SD) obtained after AFFPIA analysis, grouped by retinal area (temporal, nasal), rim and study times.

Table 3 Percentage variation of mean IOP, ODPP, HR, BPd, BPs and flow values grouped by studied time intervals (T0–T1, T1–T2, T1–T3, T2–T3)

	% T0–T1			% T1–T2			% T1–T3			% T2–T3		
	Global (%)	Group I (%)	Group II (%)	Global (%)	Group I (%)	Group II (%)	Global (%)	Group I (%)	Group II (%)	Global (%)	Group I (%)	Group II (%)
IOP (mmHg)	+10.8***	+10.6***	+11.1***	–12.6***	–12.03***	–13.7***	–21.00***	–21.40***	–21.25***	–9.61***	–10.6***	–8.8***
ODPP (mmHg)	–5.42**	–6.18*	–4.50	+4.00	+4.47	+3.42	+6.71***	+7.24**	+6.08*	+2.60**	+2.65	+2.56
HR (b.p.m.)	+0.2	–0.7	+1.3	–9.5	–1.41	–4.4	–2.7	–4.96	–4.4	–1.8	–3.6	0.01
BPd (mmHg)	–1.60	–2.38	–0.70	–0.30	0.01	–0.74	–0.70	–0.01	–0.70	–0.4	–0.01	–0.73
BPs (mmHg)	–2.31	–1.46	–1.86	–0.51	–0.92	–0.19	–0.26	–1.20	–0.19	–0.25	–1.17	–0.01
Flow (temporal) (AU)	+3.92	+4.89	+2.87	+1.34	+0.50	+2.26	+16.47	+20.94	+11.55	+14.92	+20.34	+9.08
Flow (nasal) (AU)	+2.34	–0.72	+5.85	+8.04	+12.35	+3.57	+13.06	+25.95	–0.30	+4.65	+12.11	–3.74
Flow (rim) (AU)	+4.53	+2.44	+6.71	+10.92	+11.89	+9.95	+20.81*	+30.03*	+11.54	+8.91	+16.20	+1.44

Percentage variation of mean flow values obtained after AFFPIA analysis, grouped by retinal area (temporal, nasal), rim and study times.

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.