

## Abstract 9

### INTRAVITREAL METHOTREXATE INFUSION AVOIDS POSTOPERATIVE PROLIFERATIVE VITREORETINOPATHY IN UNCOMPLICATED PRIMARY RETINAL DETACHMENT

Oral

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#### **Purpose:**

To evaluate the incidence of postoperative proliferative vitreoretinopathy (PVR) after continuous intravitreal methotrexate infusion (IMI) during pars plana vitrectomy in patients with uncomplicated primary retinal detachment.

#### **Methods:**

This study is a single-center retrospective cohort design of patients with primary retinal detachment who had undergone pars plana vitrectomy (PPV) with intravitreal IMI. Patients with primary rhegmatogenous retinal detachment (RRD) were included with PVR grade A or B. Patients with less than 40 years old or incomplete posterior vitreous detachment were excluded.

#### **Results:**

Eleven eyes of ten patients were submitted to PPV with IMI for primary RRD. Six patients had PVR grade A and 5 patients had grade B. Postoperative visual acuity increased in 10 eyes and remained unchangeable in 1 eye at 12 weeks of follow-up. At the last follow-up visit, all patients had attached retina with no signs of PVR or toxicity.

#### **Conclusions:**

The present study demonstrated that IMI during PPV is a feasible and a safe approach in cases of preoperative PVR A or B in reducing the chances of PVR re-proliferation in the postoperative period.

Case	Gender	Age (y)	Eye	Surgery	pre VA	PVR	Time of onset (d)	Mac	Quad	Retinal tear	Tamponade	post VA
1	F	58	OD	Phaco+ PPV	HM	A	6	off	2 superior	H (09h e 11h)	C3F8	20/20
2	F	63	OD	Phaco+ PPV	HM	A	21	off	2 superior	H (11h)	C3F8	20/20
3	F	51	OD	Phaco+ PPV	CF	A	5	off	2 superior	H (7h e 10h)	Silicon Oil	20/60
4	M	49	OS	Phaco+ PPV	20/20	A	11	on	1 superior	H (11h)	C3F8	20/20
5	F	54	OD	Phaco+ PPV	LP	A	15	off	2 superior	H (12h e 6h)	Silicon Oil	20/80
6	M	47	OS	PPB	HM	A	30	off	2 superior	G (Superior)	Silicon Oil	20/25
7	M	47	OD	SB+PPV	20/40	B	3	off	2 inferior	G (inferior)	Silicon Oil	20/20
8	F	58	OS	Phaco+ SB+PPV	LP	B	15	off	total	H (multiple s)	Silicon Oil	20/80
9	M	66	OD	SB+PPV	20/400	B	4	off	2 inferior	H (07h e 08h)	Silicon Oil	20/100
10	M	64	OS	SB+PPV	HM	B	60	off	2 inferior	H (05h)	Silicon Oil	20/400
11	M	72	OD	SB+PPV	HM	B	30	off	3	H (10h)	Silicon Oil	20/150

TABLE 1

Abbreviations: F, female; M, male; y, years; VA, visual acuity; Phaco, phacoemulsification; PPV, pars plana vitrectomy; SB, scleral buckle; HM, hands motion; CF, count fingers; LP, light perception; PVR, proliferative vitreoretinopathy; d, days; Mac, macula; Quad, retinal quadrants; H, horseshoe tear; G, giant retinal tear; h, hour.