The Challenge Of Uveitic Glaucoma: From Immunosuppression To Surgery

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BACKGROUD

Secondary glaucoma is one of the most important and frequent complications of uveitis, representing a therapeutic challenge due to the great variety of pathogenic mechanisms involved. The use of aqueous drainage devices in cases refractory to more common medical or surgical options is growing, with success rates varying from 83-94% after 2 years. Our goal is to describe surgical success (6 ≤ IOP ≤ 18 mmHg), early (<1 month post-operatory) and late complications in patients with refractory uveitic glaucoma (UG) submitted to Ahmed Glaucoma Valve (AGV) implant.

METHODS

- Prospective study: **UG controlled with immunosuppression** implanted with **AGV with scleral flap with deep scleral trench**
- Combined **Glaucoma** and **Uveitis** subspeciality observation
- Post-op: **1st day, 1st week, 1st, 3rd and 6th month and biannually thereafter**; minimum follow-up = **6 months**
- **Ultrasonic biomicroscopy** (Ultrassonic B scanner Tomey UD-8000®) to evaluate **tube placement**, **distance to scleral bed** and quantify **conjunctival** and **valve capsular thickness**

RESULTS

- 7 eyes, 7 ♀ patients
- **Age:** 49-77 years

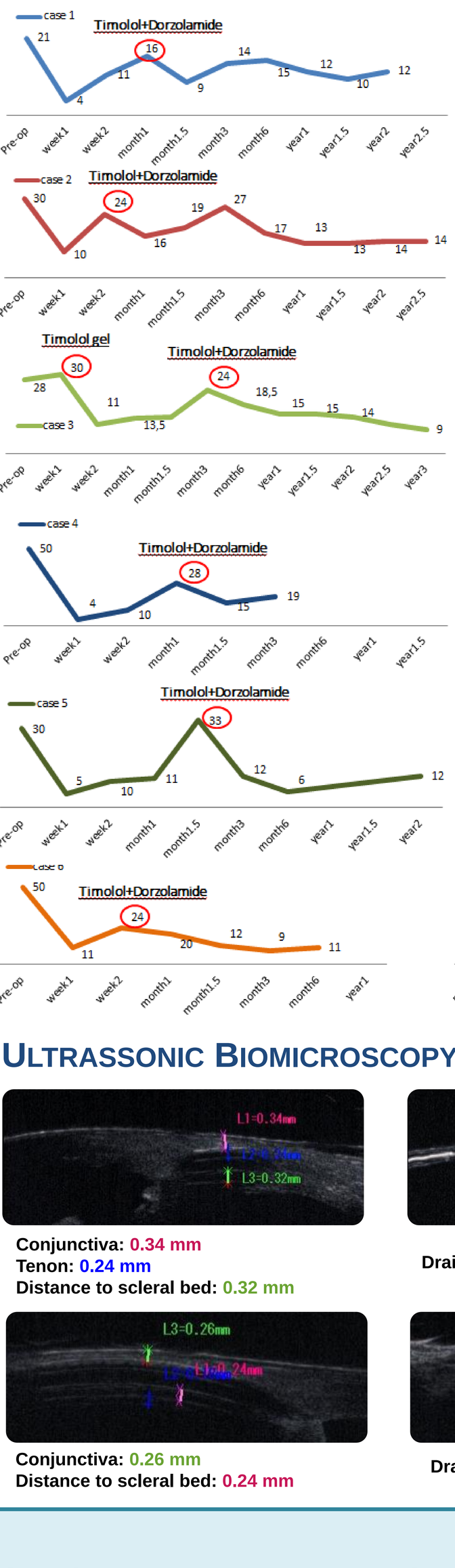
		1	2	3	4	5	6	7	Mean±SD
Pre-op	BCVA (decimal)	1	0,25	0,32	0,5	0,8	0,8	0,5	**0,60**
	IOP (mmHg)	21	30	28	50	30	50	50	**37± 12,53**
	nº drops	3	4	4	4	4	4	4	**3,86**
Final visit	BCVA (decimal)	1	0,05	0,16	0,4	0,5	0,6	0,9	**0,51**
	IOP (mmHg)	12	14	9	12	12	11	16	**12,29± 2,21**
	nº drops	2	2	2	2	2	1	1	**1,71± 0,49**
	Follow-up (months)	24,30	31,07	36,0	3,12	23,24	10,45	14,2	**20,34± 11,6**

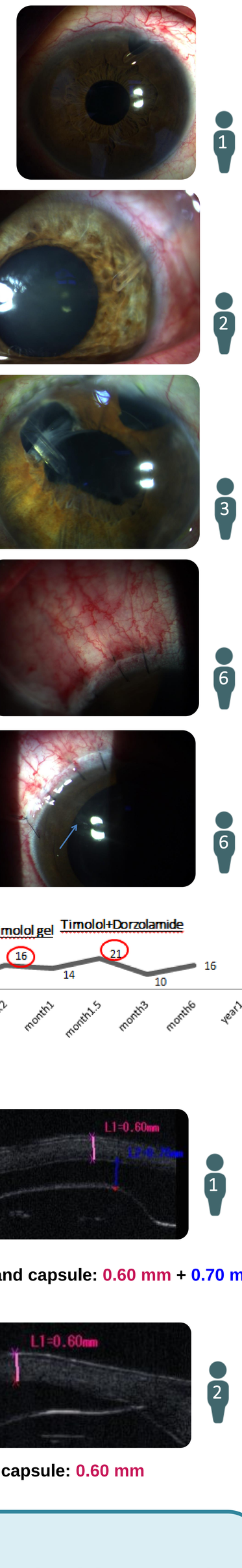
Complications			
Early (n)		**Late (n)**	
Hypertension	3	Hypertension	2
Transitory hypotonia	2	Cystoid macular edema	1
Hyphema	1		

Qualified surgical success = 100%

IOP EVOLUTION

Effective and sustained pressure control using one drop or a fixed combination.





ULTRASSONIC BIOMICROSCOPY

Conjunctiva: 0.34 mm
Tenon: 0.24 mm
Distance to scleral bed: 0.32 mm

Drainage device and capsule: 0.60 mm + 0.70 mm

Conjunctiva: 0.26 mm
Distance to scleral bed: 0.24 mm

Drainage device capsule: 0.60 mm

CONCLUSIONS

Early diagnosis and inflammation control are essential to improve outcomes and reduce the incidence of serious complications in patients with UG. In cases of traditional treatment failure, AGV implant appears to be a safe and effective solution. The combination of steroid therapy and/or oral immunosuppression with close patient follow-up are crucial for surgical success and minimizing complications.

Siddique SS et al, 2013. Gil-Carrasco et al, 1998. Da Mata et al, 1999. Papadaki et al, 2007. Rachmiel et al 2008.