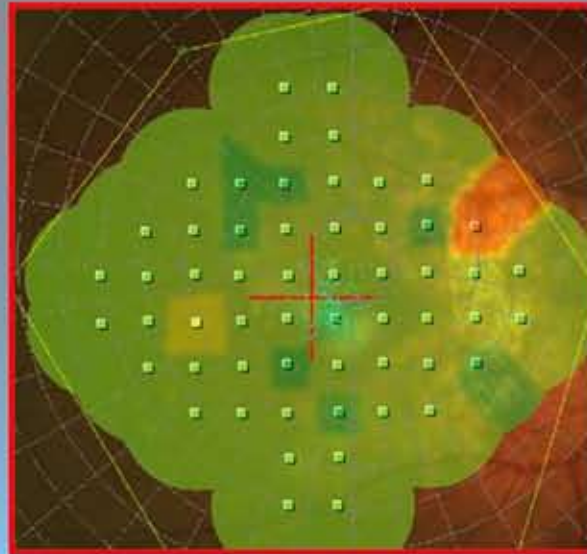


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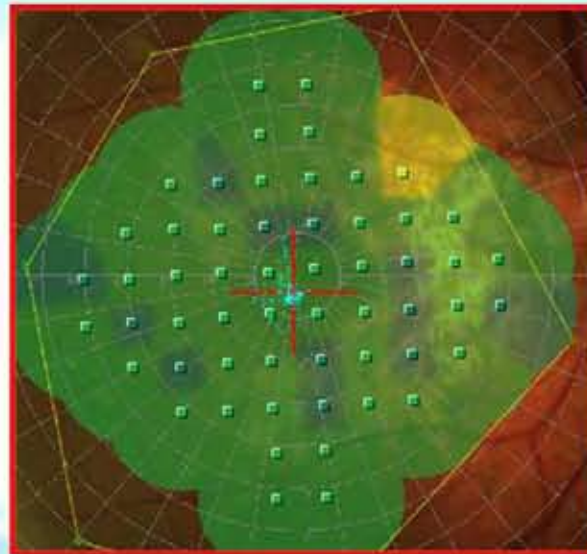
## Purposes:

The objective of this study is to evaluate the influence of growth factors, conveyed by the insertion of a pedicle between sclera and choroid, on the visual performance compared to a group control. The basic theory of the intervention is based on the attitude of orbital adipocities, if dislocated, to produce large quantities of growth factors, particularly bFGF. Being a pedicle with self nutritional apport, these cells



Pict. 2: The same case after six month from adipocities subscleral implant. The increment of bFGF is constant in the time and the patient had an ideal evolution.

are kept alive continuing the increment of bFGF.



Pict. 3: The same case after one year from adipocities subscleral implant. The constant effect of increment of bFGF in the coroideal space can improve the quality of the cells life and the light perception, te BCVA is 1,0.

	T0	T30	T90	T180	T360	T720	Delta	%
BCVA (ILS)	0,22	0,26	0,31		0,31	0,27	0,05	21,90
BCVA (Check)	0,29			0,27	0,31	0,28	-0,02	-5,74
Residual Pts (ILS)	24,80	23,15	23,60		21,70	24,05	0,75	3,02
Residual Pts (Check)	33,83			29,86	31,45	37,09	-3,26	-9,64
M. Pts. (ILS)	10,80	9,70	10,90		10,23	7,91	2,89	26,77
M. Pts. Check)	11,10			12,69	9,29	10,10	1,00	9,01
X (ILS)	4,46	4,46	4,51		4,59	4,79	0,33	7,45
X (Check)	4,39			3,54	3,85	4,95	0,56	12,76
Db (ILS)	5,83	6,68	8,53		9,27	9,49	3,66	62,81
DB (Check)	4,56			6,60	7,10	6,43	1,87	40,88

## Patients and methods:

We considered retrospectively 42 patients (76 eyes) suffering from atrophy pathologies of the retinal cells (hereditary dystrophies, age-related macular degeneration, optic nerve pathology).

These patients were divided in two groups according to the acceptance of therapeutic proposal:

Group A (20 eyes) performed the adipocities subscleral implant (ILS) and Group B (56 eyes) did not performed.

For each eye was evaluated BCVA, residual visual acuity for near and sensitivity to Nidek microperimetry (MP1). The measurements were recorded for Group A at T0, T30, T90, T360 and T720, for Group B at T0, T180, T360 and T720.

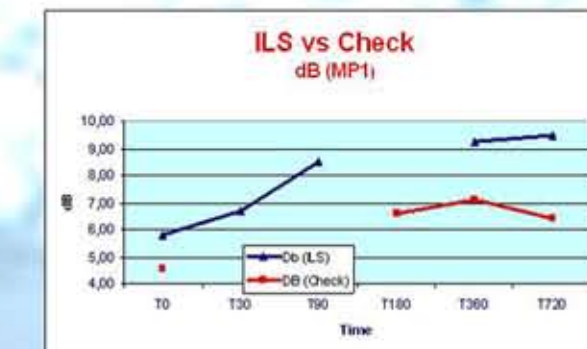
## Results:

From our experience in two years, BCVA has an improvement of 21,90% in treated cases compared with a fall of 5.74% in cases control. In two years the residual visual

acuity for near has an improvement of 3.02% in treated cases compared with a fall of 9.64% in cases control, and the sensitivity analyzed by MP1 has an improvement of 62.81% in treated cases compared to an improvement of 40.88% in cases control. The explanation of the improvement of retinal sensitivity in the cases control is due to antiapoptotic and rehabilitative treatments associated.

## Conclusions:

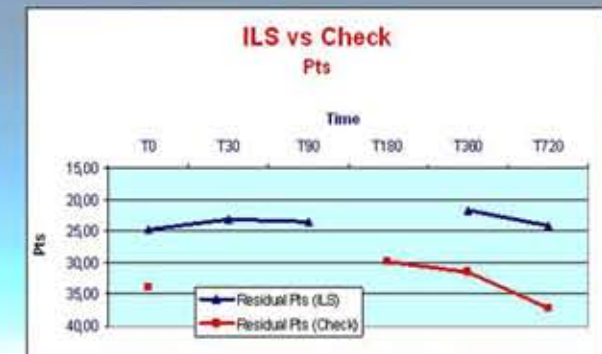
Patients who received the ILS have a more favorable



Pict. 4: By the analysis of sensibility with microperimetry, the group treated with adipocities subscleral implant have better performance after two years compared a fall in cases control.



Pict. 5: The BCVA maintains improvement after two years in the patients treated with adipocities implant, than the group no performed worse.



Pict. 6: The ability for near is the same after two years in the patients treated with adipocities implant, than the group no performed worse.

evolution than the natural history of atrophic diseases of the retina. The secretion of growth factors in choroidal space has proven capable of slowing the retinal apoptosis and the visual performances increased as consequence of the better retinal trophism.

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