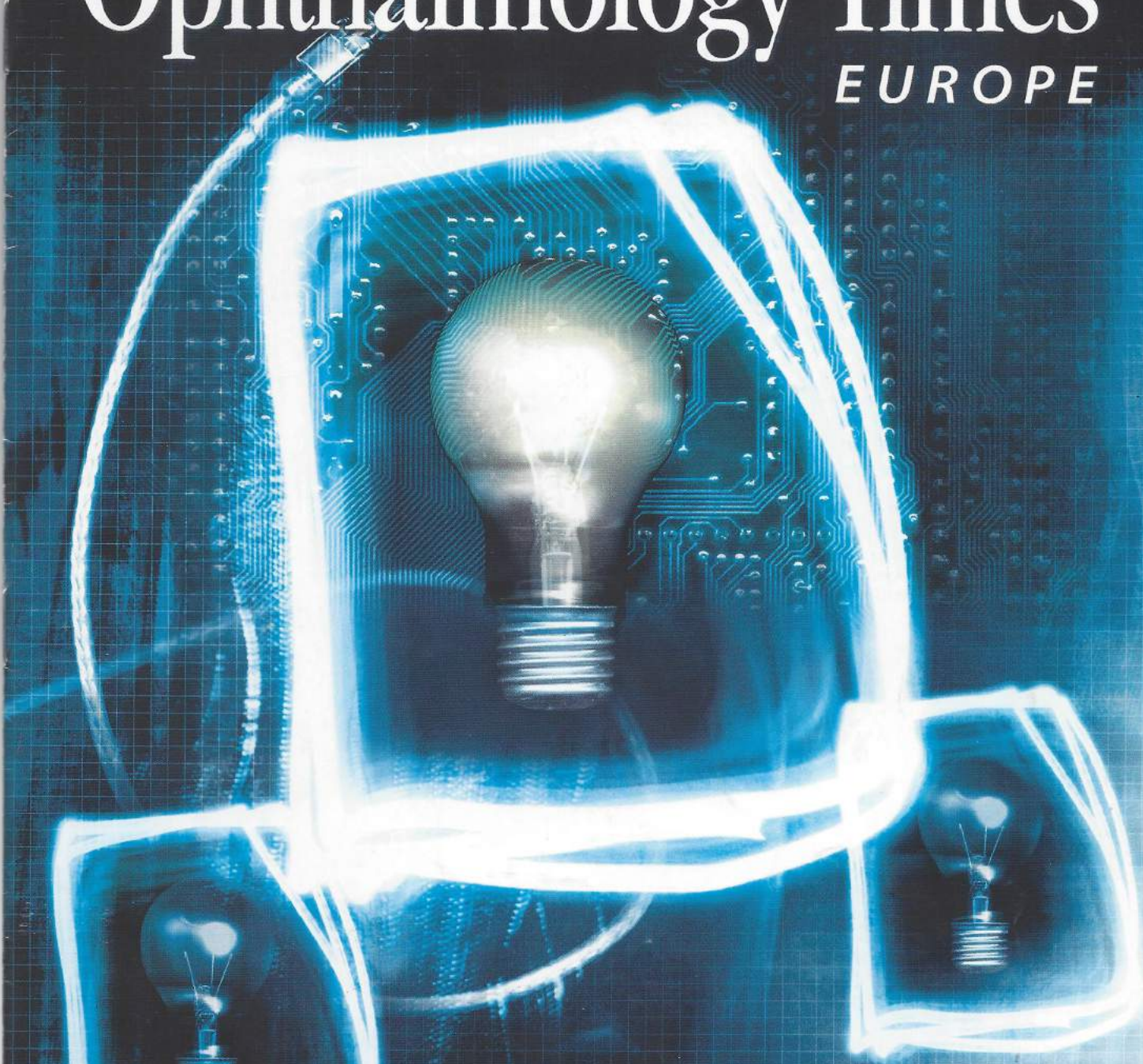


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New frontiers of ophthalmology – Part II

'Regenerative medicine' a treatment able to regenerate ocular tissues using autologous stem cells, we present a case study

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Following on from the first part of a look at stem cells and their application in ophthalmology (see July/August issue online at www.oteurope.com) A.T., a 45-year-old woman patient, came to see Dr Lombardi and Dr Belilli in March 2007 for a wet maculopathy affecting both eyes, with the left eye worse than the right eye. She reported that she had undergone photorefractive keratectomy (PRK) in 2001 (refractive and aberrometric treatment) for a modest myopia.

In October 2005, further to an examination, she was diagnosed with maculopathy of the left eye and subsequently underwent eight sessions of photodynamic therapy, with the tragic outcome of the vision in her left eye being reduced from 8/10 to finger count at 10 cm.

When Professor Lombardi's team first saw her back on 5th March, 2007 they observed the following clinical picture:

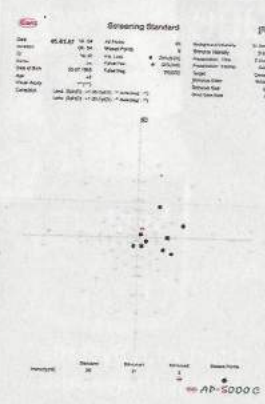
- anterior segment of the eyeball:
 - Right Eye : v.n. 5/10 corrected with (-1.5 -0.5) 9/10
 - Left Eye : central scotoma, insecure finger count at 10 cm
 - Intraocular segment: 00 pressure (both eyes): 11 mmHg
- posterior segment of the eyeball:
 - Both Eyes : diffused choroidosis
 - Right Eye : modest paramacular epitheliopathy
 - Left Eye : disc-shaped sero-haemorrhagic macular degeneration with bleeding at the posterior pole

In short...

In the second of a two-part article Drs Lombardi & Belilli present the results of a patient suffering with a wet maculopathy affecting both eyes.

Figure 1: Visual field.

Right eye



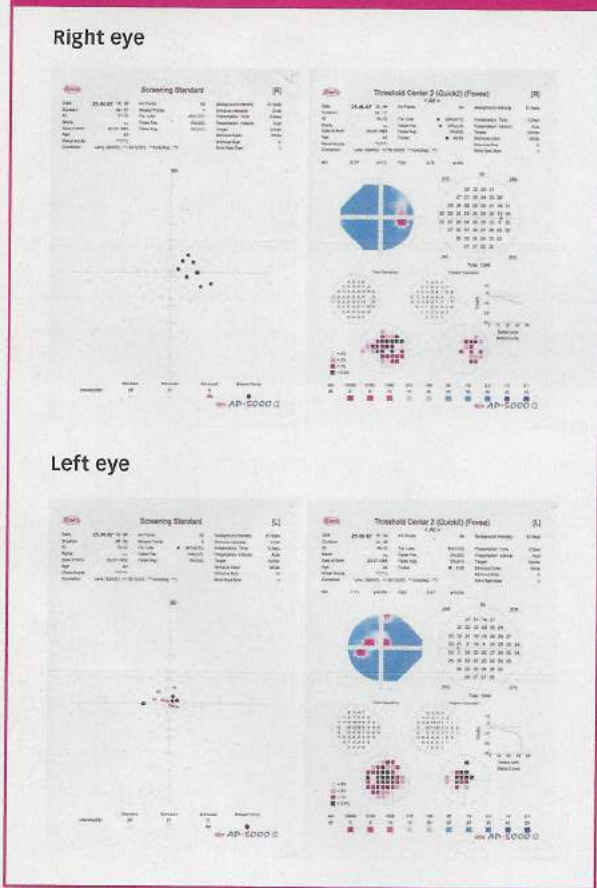
Left eye



086

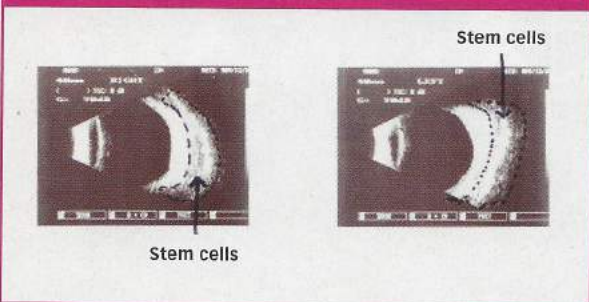
The patient underwent a homotoxicologic-organotherapeutic and bio-electronic therapy for 3 months (approx. 10 retrolubar each eye injections) prior to treatment with autologous stem cells. Once this therapeutic cycle was completed, a vision test was taken which gave the following results (see Figure 2):

Figure 2: Results of a vision test on June 25th 2007.



Treatment with autologous stem cells was performed on April 25th 2008. The patient was administered approx. 4 ml of stem cells in one deep retrolubar injection.

Figure 3: Post-treatment ultrasound on May 23rd 2008.



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Figure 4: On June 25th, 2008, a check-up of the visual field gave the following result, which can be clearly and easily compared with the previous one:

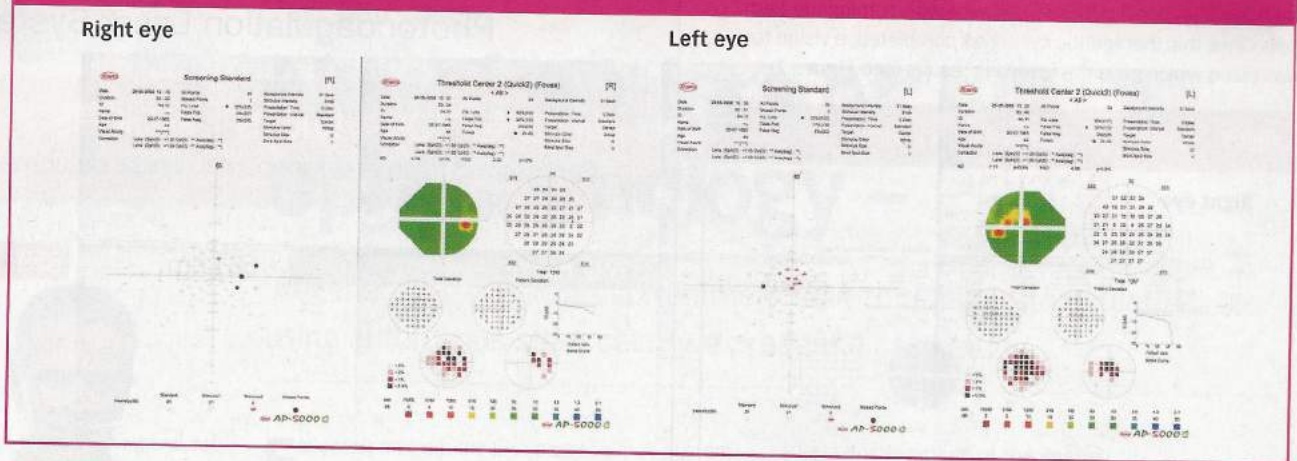


Figure 5: Comparison between pre- treatment and post-treatment visual field (at 2 months):

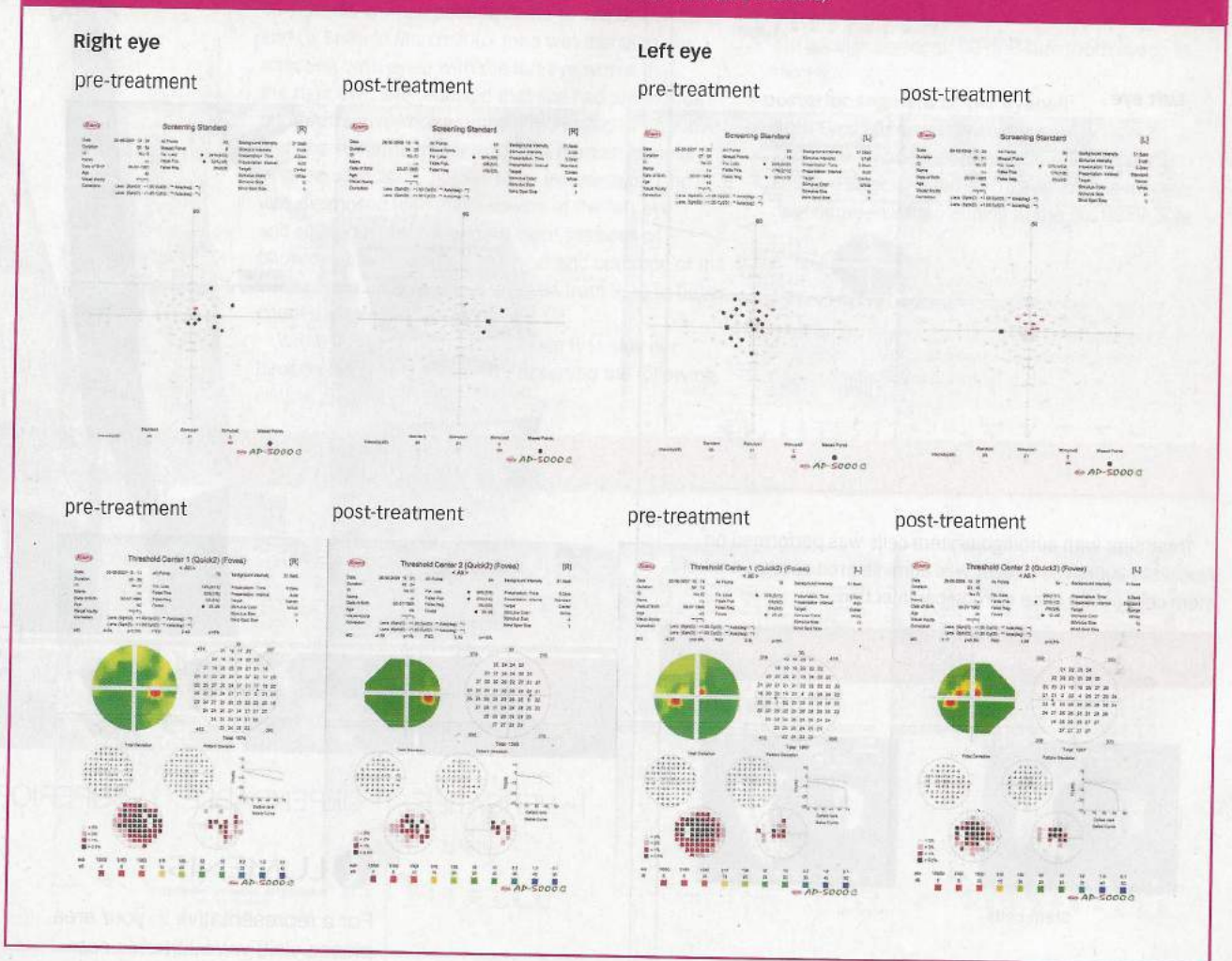


Figure 6: Comparison between pre- treatment and post-treatment visual field (at 3 months):



Outcome

The visual field has significantly improved both in terms of peripheral vision and specific Macula-Threshold test. This was followed by a *visus* improvement of the right eye with a -1.5 -0.5 correction (110°) → 10/10 and of the left eye with a -1.5 -1.5 correction (170°) → 1/50 wide.

The Macula-Threshold test is particularly important as regards photosensitivity indexes directly related to the "bio-energetic index" of retinal photo-receptors, since it shows two things:

1. when the numeric value was reduced compared to average, there is no doubt that a damaged photo-receptor was replaced or the

stem cells present on retinal tissue were re-activated through 'Bio-resonance.'

2. when the value was below 28-30, at the level of the visual field, the photo-receptor involved was probably 'Bio-energised' through 'Bio-resonance,' thereby increasing its absolute sensibility levels.

In addition to this positive outcome, Dr Lombardi also reports seeing some early positive results recorded in patients affected by pigmentary retinopathy. He hopes to publish these, once they have reached a significant number of cases.

Conclusions

Over the last few years, Dr Lombardi firmly believes a new era of medicine has begun, which he calls 'Regenerative Medicine.'

"We are putting all our efforts in this new frontier with pride and satisfaction, as we have done with other breakthroughs in ophthalmology in the past and we are now starting to reap the fruit of this work."

"Day after day we have been perfecting both the preparatory stage and the stem cell treatment itself. So, we will return to this issue with new articles and updates on ongoing treatments and results."



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