

A tale of two orbits

Acupuncture and herbal medicine for eye disease



By Paul Nebauer

This is a case study of two very different patients, both presenting with the same biomedical condition, age related macular degeneration (ARMD), with some similarities in their Chinese medicine patterns but quite different psycho-emotional characteristics. I believe these differences account for their very different responses to similar treatment protocols. On reflection, greater attention to Liver qi stasis rather than Liver blood deficiency may have been more appropriate for the second patient.

QI JU DI HUANG TANG (Lycium, Chrysanthemum and Rehmannia Decoction) is one of my favourite formulas. I've always admired the elegance of the Rehmannia family formulas, and seem to attract patients who are Liver blood deficient with some Liver yang rising, hence *Qi Ju Di Huang Tang* and *Jia Wei Xiao Yao San* (Augmented Rambling Powder) are frequently dispensed in my clinic.

My fascination with *Qi Ju Di Huang Tang* (Lycium, Chrysanthemum and Rehmannia Decoction) began in the early '90s when treating a number of patients who were functionally blind or experiencing blurred vision, light sensitivity and unstable changes

in visual acuity. These patients would report subjective improvements in vision—such as being able to read bus numbers and street signs from further away, or a decline in “floaters”—but I had no objective evidence of improvement.

My first proof of positive clinical response came after moving to Bellingen on the mid-north coast of NSW in 2003 and getting feedback from local ophthalmologists/optometrists able to compare findings over time. Two patients in particular stand out, both older women with advanced ARMD, who presented with challenging ophthalmic symptoms.

Margaret, 74, presented with a retinal tear in her right eye, and advanced ARMD and cataracts in her left eye. The tear had deprived her of central vision from her right eye, leaving her with only peripheral vision in that eye. Her left eye was functionally blind. She could not see people's faces and found this distressing. Margaret had a history of ARMD (primarily of the “dry” type), cataracts in both eyes and a previous retinal tear that had been treated with gas injection and postural confinement (lying face down for 11 days!) She was desperate to avoid repeating that. I told Margaret about my experience, and that the literature seemed positive enough to make a course of treatment worthwhile;

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at least while she waited for an emergency ophthalmology appointment.

We began twice weekly acupuncture treatment using points around the affected eye, plus distal points like *Fengchi* (GB 20), *Guangming* (GB 37, *luo* point); *Zulinqi* (GB 41) and *Yanglao* (S.I. 6) traditionally indicated for eye diseases. As well, I needled bilaterally the scalp visual cortex area near the external occipital protuberance. I prescribed my own variation on *Qi Ju Di Huang Tang* (Lycium, Chrysanthemum and Rehmannia Decoction) with the additions of *Dang Gui* (Angelica sinensis Radix), *Chai Hu* (Bupleuri Radix), *Shi Chang Pu* (Acori tatarinowii Rhizoma) and *Wu Wei Zi* (Schisandrae Fructus).

The idea for this variation came from reading about a variation of *Jia Wei Xiao Yao San* (Augmented Rambling Powder) prescribed by Wei Wen-Gui to treat various ophthalmological diseases (Scheid et al, 2009, pp. 122 and 368). My variation combines the main constituents of *Qi Ju Di Huang Wan* and *Jia Wei Xiao Yao San* with the addition of *Wu Wei Zi* (Schizandrae fructus) and *Shi Chang Pu* (Acori tatarinowii Rhizoma) to provide some gentle restraint and Liver nourishment, and some phlegm-busting^a.

Qi Ju Di Huang Wan jia wei

Lycium, Chrysanthemum and Rehmannia Decoction, with additions

Shu Di Huang	20g	Rehmanniae Radix praeparata
Shan Zhu Yu	10g	Corni Fructus
Shan Yao	10g	Dioscoreae Rhizoma
Fu Ling	10g	Poria
Mu Dan Pi	10g	Moutan Cortex
Ze Xia	10g	Alismatis Rhizoma
Ju Hua	15g	Chrysanthemi Flos
Gou Qi Zi	15g	Lycii Fructus
Chai Hu	15g	Bupleuri Radix
Dang Gui	15g	Angelica sinensis Radix
Wu Wei Zi	15g	Schizandrae Fructus
Shi Chang Pu	15g	Acori tatarinowii Rhizoma

Take twice daily as a 10:1 granule extract.

a. Phosphorylated tau proteins are associated with beta amyloid tangles in neuro-degenerative diseases like Alzheimer's. The author believes that these are the same pathogenic changes described by Chinese medicine as "phlegm", and that acupuncture and herbal formulas such as *Qi Ju Di Huang jia wei* can prevent and disentangle these pathological changes. See Iwasaki et al for a description of treating advanced Alzheimer's disease with *Ba Wei Di Huang Wan* (Eight Ingredient Rehmannia Pill).

To my surprise and Margaret's delight, the affected eye healed in about two weeks. She came in after four acupuncture sessions and said, "Something marvellous has happened; I can see again from that eye." Margaret reported that she began experiencing some increase in visual activity consisting of shimmering and flashing in her left visual field after the fourth session, and that she awoke two or three days later with apparently full vision in her right eye. Several months later, she presented to have the cataract removed from her left eye and was told that the operation was no longer necessary, the cataract had resolved. The vision in the right eye is still good, despite no further acupuncture or herbs for several years.

The second patient was Rosemary, 76, a woman of middle European origin. She presented with a history of advanced "wet" ARMD in both eyes. She had previously undertaken intensive anti-vascular endothelial growth factor (anti-VEGF) therapy, culminating in weekly injections into the retinas of this then very expensive drug (in those days up to \$1000 per injection). This treatment had not only failed, it had also effectively bankrupted her and she was now living in very reduced circumstances, and with severely compromised vision.

Rosemary's story, however, is very different from Margaret's. Although her vision did improve considerably, it took many months of acupuncture and herbal therapy before improvement was consolidated, and her history since then has been one of remission and exacerbation depending on her emotional balance. At last contact, after discontinuing Chinese medicine treatment for a number of reasons, Rosemary was centrally blind; that is, she has only peripheral, dull and indistinct vision.

Rosemary's initial response was somewhat ambivalent and it was difficult to assess whether her vision was improving, partly because of language but also the lack of objective measurement tools. I had the impression that it was improving, as Rosemary would report that her "curtains and cobwebs" (scotoma) seemed to be contracting, and that she could differentiate objects better.

A report from her ophthalmologist in

September 2013 confirmed some significant clinical improvement: “This is a letter to describe your OCT (optical coherence tomography) scan performed on 5 September 2013. The right eye has only a very small amount of swelling. This is compared to last August when the swelling was massive. The left eye has absolutely no swelling at all.”

After nearly a year of regular treatment, Rosemary had started to regain some central vision; she reported being able to see more letters on the eye chart at her ophthalmologist’s surgery in early September 2013, and later reported being able to see my face, tell the time (almost) from a wall clock, see the letters “CWA” on the County Women’s Association hall in Bellingham (where I participate in a weekly community access acupuncture clinic), and to perceive tree branches and leaves instead of merely the trunks.

This stage of Rosemary’s treatment was exciting, as she would come in to community acupuncture each week with a report about what she could see and do. She was enthralled by her improving vision, and made humorous comments like “Now I can see your face, you look older than you sound!”

However, at this stage she cut the frequency of acupuncture to once a month, and also experienced a lot of frustration with her transport arrangements; her blood pressure went up and her vision was immediately affected. An OCT scan in June 2014 showed some disruption to her left retina, and her intra-optic pressure climbed slightly to 18.

At this stage I increased the blood moving herbs in her formula to guard against any possible intra-cranial/intra-optic bleeding, adding *Tao Ren* (Persicae Semen) and *San Qi* (Notoginseng Radix), but unfortunately Rosemary suffered an ischaemic stroke and after months of poorly coordinated “rehabilitation” ended up in a nursing home 45 minutes away.

During the rehabilitation process, Rosemary stopped taking *Qi Ju Di Huang Tang* (Lycium, Chrysanthemum and Rehmannia Decoction) for fear of drug-herb interactions with Warfarin.

When I last saw her in December 2015 she was again centrally blind, and too scared by Warfarin interaction horror stories to consider resuming herbal therapy.

Discussion

The questions I have asked myself over the past few years include: Are Chinese herbs different from/better than existing research-backed nutritional therapies like lutein and zeaxanthin supplementation? What are the relative contributions of acupuncture and Chinese herbal medicine to the observed clinical results, and how reliably can these be generalised? How does TCM treatment compare with current ophthalmologic treatment? Cost/benefit, compliance, etc?

Chang and So (2007) provide some interesting insights into the pharmacology of *Gou Qi Zi* (Lycii Fructus), suggesting that the polysaccharides in *Gou Qi Zi* exert the most significant neuro-protective and neuro-regenerative effects. Song et al (2011) suggest that the taurine portion of *Gou Qi Zi* does the heavy lifting, and that the zeaxanthin/lutein fraction of *Gou Qi Zi* is small and inactive in decoction. Iwasaki et al (2004) in their study treating advanced Alzheimer’s dementia using *Ba Wei Di Huang Wan* (Eight Ingredient Pill with Rehmannia) suggest that improvements in cerebral blood perfusion may explain part of the positive effects they observed in their patients’ cognitive function and behaviour.

With reference to acupuncture and herbs, Andy Rosenfarb, the preeminent Chinese medicine ophthalmology practitioner, asserts that acupuncture (specifically micro-acupuncture) is vital to increase retinal blood flow and encourage phagocytosis of drusen, the accumulated debris that compromises blood flow to the retinal ganglion cells (Rosenfarb 2007).

With reference to TCM ophthalmology as an adjunct to Western ophthalmology, more research is needed but there are indications that it could be a useful contributor to eye health. As an aside, my own father became suddenly blind from previously undetected ARMD. He finally started taking the herbs I’d been recommending for years, in combination with anti-VEGF injections, and was fortunate to regain his vision.

My impression was that the combination of herbs and injections resulted in more improvement in his visual acuity than injections alone. Other patients with presbyopia (failing near vision acuity) have reported improvements in visual acuity,



Ante Babic’s **Tips for running a successful clinic**

Chinese “magic” heat lamps are expensive and easily break. For a third of the price an electric patio heater has three heat settings, heats the whole treatment couch and comes with a warranty.

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I am unaware of any supplements having the neuro-regenerative effects that Chinese medicine ophthalmology seems to impart

being able to read fine print more easily or reduce the strength of magnifying lenses.

With reference to Margaret and Rosemary, their very different response histories point primarily to the pivotal role played by emotional factors in determining how people respond to stressors in their lives. Both were similar in terms of their physical disharmony patterns, showing Liver blood deficient patterns evident in the drying up of their retinas; however, Rosemary's underlying Liver qi stasis had transformed into Liver qi rising and eventually Liver wind. These differences were clearly evident in their psycho-emotional expression. Margaret is a remarkably positive and proactive woman who exercises regularly, meditates and does qi gong. She has lived a life filled with difficulty and adversity, but always made the best of her situation.

Rosemary on the other hand tended to the sort of perfectionism that easily spilled over into anger and depression. She had a history of difficult family and social relationships that left her isolated and frustrated, and she found the physical limitations of functional blindness, and the dependency this entailed, particularly galling. Her emotional volatility was clearly reflected in the ebb and flow of remission and exacerbation of her eye function. In retrospect, greater attention to Rosemary's anger/frustration and hypertension would have been appropriate, although this was made difficult by her sporadic attendance at the community clinic and unclear communication about her blood pressure. Certainly with any current patients with ARMD and stuck qi, I address the Liver qi stasis/hypertension first. Sometimes this can be done simultaneously, by adding *Gou Qi Zi*, *Ju Hua*, *Wu Wei Zi* and *Shi Chang Pu* to *Jia Wei Xiao Yao San* for instance. Of course, other modifications may be appropriate on a case-by-case basis.

On the question of the relative merits of Chinese herbal therapy versus nutritional supplementation, I am unaware of any supplements having the neuro-regenerative effects that Chinese medicine ophthalmology seems to impart. Similarly, anti-VEGF therapy appears to be a holding operation that maintains the status quo without effecting any functional improvement. So the healing potential of acupuncture and Chinese herbal

therapy for eye disorders is exciting. Against that, a dearth of peer reviewed clinical trials and research forms a considerable barrier to the widespread adoption of these priceless therapies. Imagine being able to present systematically conducted, statistically significant research (to the NHMRC, Norman Swan and Vision Australia) and have them endorse Chinese herbal medicine and acupuncture as clinically superior and affordable alternatives, or adjuncts, to the current accepted practice.

Now there is a vision worth fighting for!

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