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Photodynamic therapy with verteporfin for juxtafoveal choroidal neovascularisation secondary to pathological myopia

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The treatment of choroidal neovascularisation (CNV) secondary to pathological myopia has presented a number of problems to ophthalmologists over the years, but the advent of photodynamic therapy (PDT) with verteporfin has changed how we manage these patients.

Until PDT became available, the use of laser photocoagulation for extra and juxtafoveal lesions had been shown to be effective in the short term in preventing loss of vision, although the risk of regrowth of CNV and undertreatment were well recognised. However, even in apparent successful cases of photocoagulation, laser scar enlargement and creepage into the fovea in the mid-to-long term often occurred with resulting loss of central vision.1 Other options for treatment were very limited with little evidence that other modalities such as transpupillary thermotherapy or submacular surgery and macular transplantation surgery would be successful in highly myopic eyes.

The evidence for the role of PDT and verteporfin CNV secondary to pathological myopia comes from the verteporfin in photodynamic therapy (VIP) study that has shown how effective this treatment is in eyes with subfoveal CNV.^{2,3} Now in this publication, Lam et al4 from Hong Kong have shown that PDT is also effective in juxtafoveal CNV, with high myopia.

They performed a small prospective study of 11 patients of mean age 44.8 years, with 12 months of follow-up. They found that there was

a mean improvement of 1.8 lines of LogMAR best-corrected visual acuity (BCVA) at 12 months, with a mean number of 2.3 PDT treatments. The most rapid improvement occurred within the first 3 months of treatment and by 12 months none of the patients had suffered a deterioration in BCVA from baseline. There were no cases of adverse effects from the infusion or laser treatment.

For ophthalmologists dealing with patients with CNV secondary to causes other than AMD, this is further evidence of the effectiveness of PDT with verteporfin in maintaining vision. These patients are likely to be younger than those with AMD and are likely to be in active employment and supporting families, and clearly the preservation of best vision possible is imperative in this group. It is therefore encouraging for ophthalmologists in the United Kingdom that the verteporfin in PDT Cohort Study (VPDT Study) includes the ability to treat patients with subfoveal CNV secondary to high myopia if they fulfill National Institute of Clinical Excellence guidelines, and will allow representations to be made on an individual basis for treatment of juxtafoveal lesions.⁵ For those ophthalmologists used to juggling increased patient expectations with scarce NHS resources, this is promising news and will allow us to offer a better standard of care to our patients.

References

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