



The Royal College of Ophthalmologists Maximising Capacity in AMD Services

AMD Services have continued to expand following the introduction of contemporary treatments for AMD. The workload associated with such contemporary AMD services is significant and will continue to increase as it is agreed that despite pro re nata (PRN) treatment with ranibizumab, best outcomes are achieved with monthly follow-up visits. It is expected that these follow-up visits may continue for as long as four years. The staffing of these clinics, including medical, in some departments is well below the expected levels. This was shown in the recent College Survey. Some eye departments have been unable to recruit medical staff especially middle grade doctors, either because of inadequate funding of services or inability to recruit to the correct specification. The pressure on resources and service delivery in the AMD clinics will become even more intense as we are unable to discharge patients in the system, but have to accommodate all the new ones. The regular monthly follow up for AMD patients under treatment in order to maintain efficacy is quite demanding. This situation is likely to be further aggravated by the impending treatments of retinal vein occlusions and some diabetic retinopathies with intravitreal therapies. As such the problem seems more acute than was originally envisaged, and will get worse.

Whilst it is thought by a small minority that the bottleneck is with the intravitreal drug delivery, the majority of AMD specialists agree that the capacity problem is due to the increased and recurrent indefinite follow-up clinic visits required for these patients. The ideal solution would be the employment of more consultant or middle grade staff in these clinics.

It has been suggested that in the absence of adequate ophthalmic medical manpower to fully staff AMD services, the potential of engaging non-medical staff (optometrists, nurses, technicians) to undertake some of the duties in the AMD clinic in order to increase capacity. Such roles include clinical assessments, especially re-treatment decision making, and/ or intravitreal drug delivery. Some ophthalmologists feel that the bottleneck lies directly with the intravitreal injections. As such the workload would be contained if intravitreal injections are undertaken by trained technicians/nurses. However, it is more widely thought that the monthly assessments are more time consuming, and that the intravitreal drug delivery, although time consuming, is containable.

Potential solutions

The suggested solutions include:

- i) Widening the network of AMD service provision. This involves opening up the treatment of AMD to general ophthalmic departments and non-retinal specialists.
- ii) Intravitreal injections are undertaken by trained technicians/nurses.
- iii) Follow-up clinics in the community manned by optometrists.
- iv) Clinical assessments and evaluation of images be undertaken by trained optometrists/nurses under the supervision of a retinal specialist with expertise in AMD.

The first option is thought inappropriate as, amongst other things, it will draw resources away from other ophthalmic services e.g. general ophthalmic services, cataracts and glaucoma. Some 're-training' of clinicians may be required as well.

The recruitment of middle grade doctors has been problematic. The option of intravitreal drug delivery by non-medical staff may have some attraction. Irrespective of its 'simplicity' intravitreal drug delivery is still invasive. Such simplicity will not necessarily apply to the potential new treatments with *Porsudex* [*Ozurdex*] (intravitreal dexamethasone implant) and slow release ranibizumab when they become available. The process will require careful planning and training followed by monitoring. However, intravitreal injections are straight forward if undertaken by someone who knows what they are doing. The person must be able to manage possible complications. The cost of nurse/technician injections will not

be considerably cheaper than injections by medics. Furthermore, there are probably not too many nurses/technicians queuing to undertake IVTs. It will take time to train and assess their competencies. Leave of absence is more an issue with nurses/technicians. Retention will be poor especially after the novelty wears.

There is one area in the UK which has decided to introduce such a scheme. I am aware of only one area where this option has been taken up in the EU (Copenhagen). All the potential problems with training, recruitment and retention above have been encountered in Copenhagen. Other countries in the rest of the world will not countenance such a scenario as it is felt that intravitreal injections have to be given by a medically trained person.

Clinical assessment by non-medical personnel in ophthalmology has been tried for a long time in the UK, particularly in the field of glaucoma. Some AMD clinics in the UK have adopted schemes based on the glaucoma model. As an example, one consultant specialist can oversee a clinic where up to 45 patients with AMD are evaluated and treated if necessary by another doctor in the same clinic. This is made possible by the use of the trained optometrists each undertaking slit lamp (including fundus) examinations, undertaking and interpreting OCTs in set rooms whilst the consultant moves from room to room making decisions. Data is all entered into an electronic system prior to the arrival of the consultant in a particular room. Images and clinical information are reviewed to allow decisions. This model requires the availability of multiple consulting rooms each catered with slit lamp and OCT.

Community optometrist follow-ups face the problems of training optometrists, duplication of equipment provision, managed referral back into the AMD clinic for those who require further treatment with the attendant logistical problems, and supervision by a local medical retina specialist.

Despite difficulties with the recruitment of middle grade doctors, intravitreal drug delivery by doctors is still the preferred practice. It is also envisaged that there may be a reversal in medical manpower shortage in the near future when the expanded cohorts of medical students (including graduate entry students) join the ophthalmic workforce.

Recommendation

It is recommended that the model of 'Clinical Assessments and evaluation of images be undertaken by trained optometrists/nurses under the supervision of a retinal specialist with expertise in AMD' is more acceptable to current clinical practices and should be encouraged.

Intravitreal injections by trained technicians or other non-medical personnel is not recommended at this stage.

Mr. Winfried Amoaku

Chair, AMD Provisions Subcommittee

Vice President & Chairman of the Scientific Committee

© The Royal College of Ophthalmologists 2009 All rights reserved

For permission to reproduce any of the content contained herein please contact events@rcophth.ac.uk