

# Five Years of Vitreoretinal Surgery 'on-site' at Eye Institute

BY PETER HADDEN\*

Eye Institute vitreoretinal surgeons Peter Hadden and Nick Mantell are celebrating five years of having Auckland's only private eye clinic with an on-site fully equipped vitreoretinal theatre. In this article they will outline how this change has transformed their vitreoretinal service for the better. It has helped, of course, that major technical advances have occurred over this period.



## The Comfort Zone

Both Peter and Nick did their vitreoretinal training in a hospital environment, and on returning to Auckland, performed such surgery at Auckland Hospital (publicly) and Mercy Hospital (privately). Patients often stayed in overnight as vitreoretinal surgery was considered major surgery and were given a general anaesthesia.

However, changes were afoot overseas; local anaesthesia was becoming more widely used. Peter had had the interesting experience of talking to a colleague in the United Kingdom who had decided to try local anaesthesia for all his patients, and had been pleasantly surprised to find that it was more than just practical; patients and staff both liked it, and it avoided the risks, uncommon though they are, of general anaesthesia. Cost was also an issue; the costs to the patient of being treated in a hospital were climbing steeply every year. Some readers may remember how in times past even cataract patients were routinely admitted to hospital for days while their operation was undertaken and when it stopped being a major inpatient procedure of course there were concerns, but those have also been proved baseless.

## Advantages

At the time of the changeover, vitreoretinal surgery itself was changing, making surgery easier, less traumatic for the patient, and quicker. Such changes are continuing to happen, and examples of such changes include:

Narrow 23 and 25 gauge instrumentation which has not only reduced the risks of any surgery but also provided patients with no-stitch small incision surgery and has thereby minimised post operative discomfort and made the recovery time for patients much quicker. This depended on other changes such as high powered xenon light sources to provide better illumination during surgery through smaller cables;

The 'Eibos' viewing system, unique in Auckland, which renders the constant requirement to invert and re-invert the surgeon's image obsolete;

Better optics and easier to use microscopes, with features such as magnetic locks. We purchased a top of the range 'Moller-Wedel' operating microscope which had these features.

The recent purchase of the Constellation vitreoretinal unit, first equal in New Zealand and amongst the first three in Australasia, is particularly promising. It provides greater retinal stability during surgery, which reduces even further the risk of complications such as retinal detachment. It has been the subject of two previous articles in NZ Optics so we shall not add to what has already been said!

We remain, of course, committed to the continued purchasing of state-of-the-art equipment making vitreoretinal surgery easier and providing quicker recovery than ever before; the next piece of equipment coming on board is a Phacoemulsification "Ozil" adaptor to the Constellation, being installed as this piece is being written, making us the first to have the ability to do a phacovitrectomy with Ozil, the latest advance in cataract surgery, in New Zealand and ahead of anywhere in mainland Australia!

Local anaesthesia has also improved. Eye Institute, with the able assistance of our anaesthetists, particularly Drs Rory Scott and Mike Fredrickson, has also been pioneering in providing highly skilled local anaesthesia for vitreoretinal surgery, tailored to the individual patient's needs, to maximise safety and comfort. Patients relax in the comfort of their own homes just as they would after cataract or LASIK surgery, which once again demonstrates how far vitreoretinal surgery has come from the old days of hospitalisation. This author struggles to remember the last time any vitreoretinal patient required a general anaesthetic; the only reason would be one which would also require such an anaesthetic for cataract or any other surgery also, i.e. a child or mentally handicapped person unable to lie still.

We did wonder if patients would like to have the option of staying overnight. We have the neighbouring Auckland Surgical Centre, which provides inpatient accommodation, so we arranged with them for the overnight care of patients if required. However, we have never needed to do this for medical reasons. From a patient's perspective (and an insurance company's too), a night in the Hilton would be cheaper! Keeping control of costs was also a major reason behind moving away from expensive private hospitals as vitreoretinal surgery is already amongst the most expensive procedures in ophthalmology.

We can also readily access clinic equipment that is now just in the next room. For instance, if we wish to take a final look or just repeat a macular OCT to confirm the preoperative anatomy, it's in

the next room rather than at another site.

However, if we had to say what the biggest advantage of having our own, on-site dedicated eye and vitreoretinal theatre was, we would have to say that it has been the ability to do urgent cases on the same day every day and at a time that is reasonable for both patient and surgeon (not at midnight!). Scheduling is less flexible in large hospitals, which need to accommodate the needs of other specialties. This has also been the case with the public hospital shift to Greenlane.

## Combined Phaco-Vitreotomy Surgery

Cataract is very common in association with vitreoretinal disorders and (depending on the circumstances), may often be hastened by the patient having vitrectomy surgery. It is therefore of great benefit that the vitreoretinal theatre is also the one used for modern state of the art refractive-cataract surgery. It is in fact the only theatre in Auckland equipped with both the Alcon Constellation Vitrectomy machine and the Alcon Infiniti Phaco machine, which uses the 'Ozil' torsional phaco to minimise phaco power during cataract surgery. Peter and Nick are both also very experienced cataract surgeons, so combining these two procedures for many patients is much preferable to having them done independently and to be able to use both of Alcon's top of the range machines for each is obviously very advantageous.

## Conclusion

We are very happy to be able to provide vitreoretinal surgery 'on-site' at Eye Institute, and although initially it involved moving



The most important 'equipment' in our theatre: some of Eye Institute's theatre staff (from left to right: Ann, Cecilia, Brenda, Janet, Ama and TC) together with the Moller-Wedel operating microscope, Constellation vitreoretinal unit and the Infiniti phaco cataract

out of our comfort zone, we can discern no disadvantage and have realised many more advantages than we suspected. We had concerns initially; hence this article was not published five years ago! However, it is fast becoming standard practice. We are sure that in due course 'on-site' vitreoretinal surgery will become universal. ●

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