CATARACT REMOVAL AND IMPLANT INSERTION

The cataract is normally removed by a hand held probe. This probe uses ultrasound energy to break up the lens. This will now be done by the laser. The actual removal of the broken up lens and the insertion of the implant is still however done by hand.

CAPSULAR OPACIFICATION (SECONDARY CATARACT)

One of the problems with cataract surgery is the development of posterior capsular opacification (PCO). This can occur in a percentage of patients months to years after the surgery. This is the formation of opaque areas on the back surface of the capsule that is holding the implant in place. It results in a drop in vision. It is known that a key factor in preventing this is having a complete overlap of the front surface of the lens by the hole in the anterior capsule (the capsulorhexis). With a hand torn opening this can be a bit hit and miss but with a laser created opening it will be perfect very time. Although PCO is easily managed, minimizing is of course preferable.

THE FINAL OUTCOME

The results of laser cataract surgery should be safer and more precise than ever.

This does not mean that will not be any problems as ALL surgery carries a risk of complications. It simply means that those risks are less. It should also mean that results are more accurate but again it does not mean that everyone will be 100% happy as that is not possible.

COST

The cost of cataract surgery is normally covered by Medicare and your health fund. However as laser cataract surgery is new, there is an additional cost, charged by the hospital which is not covered. Ask us for details.
WHAT IS FEMTOSECOND LASER CATARACT SURGERY

In a conventional cataract operation, a surgeon performs the entire procedure by hand. The entry ports, the wounds, the opening of the lens capsule and the removal of the lens are all done by hand. The opening of the lens capsule in particular involves tearing a round hole in the front of the lens capsule by hand. This is akin to taking a piece of paper and tearing a round hole in it.

Femtosecond Laser cataract surgery does all of this with a computer guided laser. The surgeon instead controls the operation with a keyboard and monitor. In essence, it is robotic surgery.

WHY EVERYONE SHOULD HAVE IT

As key parts of the procedure are now NOT done by human hands, there is less to go wrong therefore surgery is much safer. Furthermore the steps are now precise and reproducible so these steps are now perfect every time.

One of the biggest difficulties in cataract surgery is the unpredictability of the refractive results (the final script and therefore what glasses are needed after surgery). At present, if we want to leave our patients with no glasses for distance after surgery, we can only be confident that we will achieve it 75% of the time. Although the remaining 25% may come close, there are some that end up considerably out from our target and therefore still unable to see without glasses. Laser cataract surgery promises to improve the odds of getting closer to our goal.

BETTER ASTIGMATISM CONTROL

The wound creation is now precise and reproducible. This is very important as the wound has a major role in how much astigmatism is left after surgery. Precise reproducible wounds should therefore translate into less astigmatism.

BETTER IMPLANT POSITION

A key factor in reproducible and accurate surgery is the final position of the implant. The implant needs to be precisely at the right position. This is highly dependent on having an accurate, round opening in the capsule which is of the correct size. With laser cataract surgery this will now happen every time.