

## Chapter One - Laser Eye Surgery - 41 years old



I did not set out to have laser eye surgery in the beginning, it just sort of happened. I must have watched countless television adverts over the years without giving it too much thought. I have worn glasses since I was twenty years old and I have had numerous check-ups. When laser eye surgery was first developed opticians told me that I was unsuitable for laser surgery due to astigmatism. The procedure, so I was told, was only for people with perfectly round pupils. I was soon to discover that technology has moved on significantly since those days.

The path which led me to the surgery began on a Saturday morning in July 2010. I now rarely work on a Saturday, but on this particular day I was in supervising some contractors.

At breakfast time I came across an Optical Express outlet on the way to the cafe. This served as a reminder that I needed a check-up and perhaps some new glasses. It was quite a large outlet with the upper floor windows dedicated to advertising laser eye surgery in particular.

I waited until Monday morning and popped in to ask to speak to a consultant, mainly out of curiosity. Now, I was about to discover that for all their experience and brilliance in actually developing the technology (and performing the surgery) they do also employ incompetent functionaries. I was 'reliably' informed that all I had to do was make an appointment and they would carry out some preliminary checks. I was also told it would only take half an hour and they would answer all my questions. Before I left I did ask the sales rep why he had not had the treatment (as he wore glasses). He informed me that he was not suitable for surgery, not everyone is.

As it was free of charge, only around the corner and took a mere half an hour I thought I had nothing to lose so I made the booking. It was more out of hope than expectation. If I discovered that I was unsuitable for the corrective surgery then I would simply buy some new glasses and carry on as before.

I received a phone call the night before to remind me of my appointment but was given a different time to the one I had arranged. I didn't question it at the time because I did not have my appointment card to hand, but I did think it was incorrect. The administrator also stressed how important it was that I was on time.



The next morning I popped in on my way to work to clarify the situation and was told that my original time was correct. Now, if they are going to take the trouble to call I think that they should impart the correct information. When I arrived for my appointment I was then told I should have arrived fifteen minutes earlier to fill in the paperwork! I was not informed of this previously and I told them so. I was beginning to think that all these little errors happen on a regular basis. I completed the four pages of paperwork, although it did feel a little unnecessary. I had not even spoken to a consultant yet and it could have waited.

When I was finally seen after twenty minutes I was told by the consultant that the session would take two hours and not just half hour, (there is a lot of waiting around, with only half hour of actual checks). I couldn't spare the extra time as I was at work so I asked for my paperwork back and left, a little annoyed. As well as being a little frustrating it is also unnerving to be given incorrect information by the very people you are trusting with your sight. It does not exactly inspire you with confidence.

It was only a five minute walk back to my office and on the way I gave some thought about whether to pursue it any further. I still needed a check-up of some description and although I had been inconvenienced it was not too badly. I had just arrived back when I received a phone call from the consultant. She apologised and asked if I would consider rebooking on Thursday as they are open till 21:00. I was still a little annoyed and I told her so, I also gave her a full account of what had happened. However, I was persuaded to make another appointment for 17:00 which meant I could have the checks and still get to darts on time. This time things went a little more smoothly, I had already filled in the paperwork, so I just had to wait my turn. After fifteen minutes of waiting I was led to one of the consultancy rooms.

In the room there were three machines, each designed to perform a different set of tests. Below I have listed all the types of tests carried out with an explanation of their purposes.

**Focimetry:** Was a measurement of my current glasses prescription.

**Autorefraction:** Another tool designed to help determine my baseline prescription. It did this by passing light through my eyes.



**Tonometry:** Was used to measure the pressure in my eyes. It is also used to diagnose the eye disease glaucoma.

**Pentacam:** This provided the specialist with information about the depth and shape of my eyes. Measurements were needed from the centre to the edge. This is important to know as they would be removing some layers during surgery.

**CustomVue Wavescan:** This device measured all the flaws and imperfections in my eyes. It did this with up to twenty five times more accuracy than a regular eye test.



This also formed part of the information needed for the Wavefront treatment.

**Visual Acuity Testing:** This was more like a conventional eye test using a chart on the wall. The consultant wanted to check how my eyes performed without glasses and then used a machine to add lenses to retest my prescription. This did seem to be the least accurate of all the tests because it was very subjective. I was asked to read from a chart and state what I could see.



**Refraction:** This was another test which was used to confirm my current prescription. It did this by comparing the focimetry readings and my previous prescription details.

**Pachymetry:** Another machine used to determine the thickness of my corneas. This time the Pachymeter machine used ultrasound all over my eyes. This was probably one of the most important tests to determine whether I was suitable for laser vision correction or not.

**Slit Lamp Exam:** This test used a microscope with a small beam of light to examine my corneas under high magnification, as well as my conjunctiva, eyelids, iris and lens.

**Eye Dominance test:** My prescription was checked on each eye and I was asked to make a circle with my thumb and forefinger. I focused on an object and centred it with both eyes open. Then I closed only my left eye and it stayed where it was. When I closed only my right eye it moved, proving my right eye was the dominate one, who needs technology!

**Pupillometry:** This test took a measurement of the size of my pupils. It used infrared technology in the dark when my eyes were fully dilated.

**Retinal Exam:** With this test the specialist refractive optometrist was assessing the health of my internal eye and in particular the retina. The eye drops used for the **Cycloplegic Refraction** helped provide an excellent peripheral view.

The first round of tests took ten minutes and I was asked to return to reception. The next time I was called I went to a different room with a second consultant.



**Cycloplegic Refraction:** Eye drops were used to relax my eye muscles. The main purpose was to allow the consultant to determine how my prescription was likely to change over time. I was told the effect would feel strange because my far vision would be unaffected but my near vision would become blurred. The effect was exactly as described by the consultant as the drops had removed my ability to autofocus. My vision was locked to long distance and it did feel odd but not uncomfortable. I was then asked to wait in reception and someone would bring a copy of the brochure to read!

No one brought me a brochure, although I could not even read my newspaper at this time. The same drops would be used in the operation to temporarily paralyse the eye. This was another example though of their failure to deliver something simple and I got another apology. I know a lot of these faults I am mentioning seem a little petty and I am fairly tolerant, but people are spending a lot of money on this service. These little things are easy to get right and I believe it is purely down to poor internal communication and complacency.

The next visit was back to the second room and after some more tests I was surprised to hear that I was suitable for the surgery. I had a few questions for this consultant and they were as follows: I asked "How safe was the procedure?" she replied "It has a 96% success rate". "Ok" I said, "I am not really interested in the 96%, what happened to the 4%? Has anyone ever lost their sight?" "No one has ever been blinded" she laughed "if the operation is not 100% successful it has to be performed again until they get it right".

I made the decision to have the operation and was taken to the last room with a third different person and was presented with the brochure for the first time. The main decision I now had to make was to choose between *LASIK* and *LASEK* (as *KAMRA* was not required).

*LASIK* is a very quick and very safe two step procedure. In the first step, a protective flap is created. The flap can be created using either a microkeratome or a very sophisticated laser called intralase. Optical Express now has the most advanced version of the intralase, called IFS 150. In the second step, the flap is gently lifted and then another laser, the VISX S4/IR Excimer laser precisely re-shapes the curve of the cornea to correct and sharpen vision. After the laser re-shapes the cornea, the surgeon gently re-positions the flap. The intralase and the VISX lasers have been shown in studies to provide unprecedented improvement in quality of vision and was the basis of NASA's decision to allow *LASIK* in astronauts.

*LASEK* is a laser procedure that is very similar to *LASIK* and is performed in a small percentage of patients that are unsuitable for *LASIK*. The primary difference is that *LASEK* requires no flap. Instead, the VISX S4/IR Excimer laser is applied to the surface of the cornea after the surgeon gently removes a thin layer of surface cells called 'epithelium'. Just as in *LASIK*, this procedure can be performed using either traditional or more advanced 'wavefront' laser technology. After the procedure, a soft contact lens is placed on the eye to promote healing and comfort during the first three days. Whilst recovery is a bit slower with *LASEK* than it is with *LASIK* the lens is removed on the fourth day. Recovery is a bit slower with *LASEK* than it is with *LASIK*.

Once I decided upon the Lasik & Wavefront options I was presented with the paperwork. I was asked to initial a number of boxes, even though I couldn't read a word! The eye drops were still causing problems with my auto focusing. I was not pressured into signing by the consultant. But the dates did mean I could have surgery and complete my final check-up just before I went on holiday to Portugal.

The cost for the surgery came to £3,390 and I was offered interest free credit. A deposit of £300 meant that from September 2010 I would pay £309 per month for ten months. The amount was manageable so I signed the appropriate forms. I was then asked whether I preferred to have the operation in Acton (I think it was Acton or it was certainly somewhere as unremarkable) or Harley Street....an easy decision to make.

My surgeon had also operated on this consultant who told me she was an eight, I asked her to clarify further. She explained that on a scale of one to ten (with ten being the worst) I was two and a half, so my eyes were not that bad. I decided to book a hotel close to Harley Street to recuperate in following the operation. I know now that this was a little unnecessary but at the time it was a precaution. I may have felt uncomfortable and need to quickly return to the surgery.

I chose 'Durrants' in George Street after some research on the internet as it was only a short walk from the Harley Street surgery. It was a Georgian style building with a lot of character and charm. It wasn't cheap but it wouldn't be for long and it would also serve as a bit of a treat. The look and atmosphere gave me the impression that it was a 'blast from the past', old England in all its finery and elegance. A real sense of tradition and class hung in the air. Inside there were old prints on the walls, dark oak panelling and small cosy lounge rooms off of long corridors.



It was easy to imagine 18<sup>th</sup> Century gentry smoking their cigars and swirling their brandy, engaging in the topical conversations of the day. I was soon to discover however, that nearly all the staff were Spanish...oh well. I did find the Union Jack flag outside quite ironic as well. The staff were all nice enough but if I wanted to be served by 'Manuel' I would have stayed at Fawcety Towers. An ever increasing problem with this country is that it is losing its identity and it will only get worse as other cultures are absorbed.

None of this spoiled my stay at all, but when I look back I think the hotel has begun to lose its place in history. Buildings are being listed to preserve their architectural integrity but they are losing their soul.

As the operation was booked for Friday 20<sup>th</sup> August at 08:15, I made the reservation for both the Thursday and Friday nights. I thought it might be difficult booking in on Friday morning as they don't usually give access to the room before midday. The last thing I wanted to do was to spend hours sitting in the lobby.

Three weeks before the operation I bought a cheap pair of black wrap round sunglasses from a shop in Oxford Street for £5. I had been pre warned the glasses were not only for glare but to stop irritation when the wind blew in my face.

The day before the operation I left work as usual at 17:00 and walked to the gym. I was unsure when I would next get the chance to exercise. I left the gym after an hour and took a taxi from the rank outside. When I arrived at the hotel my bag was carried from the taxi by the porter into reception and I booked in. I asked for a wakeup call for 07:00, just in case I overslept. I unpacked and showered before making my way back to reception to see if I could dine in the hotel. I was alone in the restaurant as it had only just opened to guests.

I perused the menu and chose a starter of prawn and crayfish cocktail with a main course of Dover sole, minted new potatoes and spinach. This was accompanied by my usual glass or two of pinot grigio. The food, drink and service were excellent.

### **Starters**

*Vichyssoise* £7.50

*Asparagus, Poached egg & Parmesan* £8.50

*Country Terrine, Cornichons & Radishes* £9.50

*Prawn and Crayfish Cocktail* £9.50

*Parma Ham & Melon* £9.50

### **Main Courses**

*Grilled Dover Sole, Minted New Potatoes* £27.50

*Grilled Lamb Cutlets, Broad Beans & Peas, Salsa Verde* £18.50

*Grilled 6oz Fillet of Beef, Dauphinoise Potato & Horseradish Cream* £22.50

*8oz Veal Chop with Rosemary & Lemon, Spinach & Girolles* £19.50

*Seared Tuna Nicsoise* £10.50 / £16.50

*Roast Beef from the Trolley* £16.95

### **Sides**

*Minted New Potatoes Mash Potatoes*

*Pont Neuf Potatoes*

*Green Salad Spinach* £3.50

### **Desserts**

*Chocolate Mousse* £6.50

*Peach & Almond Bakewell Tart* £6.50

*Vanilla Panna Cotta, Raspberry Compote* £6.50

*Summer Pudding, Clotted Cream* £6.50

*La Fromagerie Cheeses* £9.00

After I had eaten I got another taxi to Charing Cross station but got out just before Trafalgar square due to horrendous traffic. After a few minutes I was at the station and I boarded the train. I was on my way to a darts match and it was the last game of the season. A good win would see the team secure the divisional championship. I had planned to leave just before the end, drink sparingly and catch the train back to London. The game and the division were won but dragged on a lot longer than usual so I missed the last train. The taxi arrived at the hotel around midnight and cost £32 and I went straight to bed. I woke an hour before the wakeup call, showered and had breakfast.

When I left the hotel at 07:50 the weather was overcast and I arrived at the Harley Street clinic just before 08:00.



The receptionists had just arrived as they start at 08:00 and I was offered a drink which I declined. There were three other people waiting but no one spoke, I suppose they were nervous. I recognised the surgeon (Rodney Blumenfeld) from his picture when he arrived.

He appeared quite a sombre character and he certainly did not look as if he enjoyed his work. This may be a little unkind, but that was my first and lasting impression. He called me into a consultancy room, and gave me a basic check-up. After the preliminaries he asked if I had any questions and I told him I didn't have any. I was then asked to wait outside once more.

I was a little nervous when I entered the operating room, particularly as I had been advised that the procedure would take seven minutes per eye. Not a great deal of time in itself but long enough when trying to keep your eyes absolutely still. There were two assistants in the room and I was asked to sit on the bed whilst they completed preparations.

After a couple of minutes I was asked to lie down with my head in a shaped pillow (to restrict my head movement). They then applied some alcohol over my eyelids to sterilise the area without telling me to close them first! Next they administered eye drops to numb my eyes and stop them moving. I didn't take the chance of trying to move them. Rodney then swept into the room and asked me if I was ok to which I answered "yes". The dialogue was to continue throughout the operation and I found this very comforting. If they were relaxed then I knew all was well.



*Mr. Rodney Blumenfeld was born and educated in South Africa where he qualified as an Optometrist in 1989 and went to study medicine at the University of the Witwatersrand in Johannesburg. He graduated as a student in Ophthalmology.*

*An experienced Ophthalmic Surgeon, Mr Blumenfeld has experience with some of the most advanced refractive lasers in the world including the VISX S4IR and has performed more than 22,000 procedures.*

*He is registered with the General Medical Council (GMC) and is a fully trained Ophthalmologist who has undergone additional specialist training in refractive surgery. He is a full time Ophthalmic Surgeon with Optical Express and is an active member of various affiliated bodies and societies such as:*

- South African Society of Cataract*
- Refractive Surgeons.*

*Twice every year, Mr Blumenfeld attends international Medical Advisory Board (IMAB) Conferences and is annually assessed by this board. The panel consists of several of the worlds' most eminent Refractive Surgeons including Mr. Steve Schallhorn, former head of Ophthalmology for the US navy and Professor Jan Venter a world leading Ophthalmic Surgeon. He became Registrar in 1997 at Africas' largest hospital, the St John Eye Hospital in Johannesburg. During which time he completed five years of specialist ophthalmology training with emphasis on anterior segment (oculoplastics, cataract and glaucoma surgery) as well as diabetic laser surgery. Mr Blumenfelds' UK ophthalmic experience includes:*

- The Western Eye Hospital*
- Kent County Eye and Ear Hospital*
- Royal Victoria Infirmary*
- Stoke Mandeville Hospital*
- Moorfields' Eye Hospital*

*Mr Blumenfeld regularly attends conferences and seminars about laser eye surgery allowing him to stay abreast of all developments in the advancing field of Ophthalmology.*

I was informed that he was about to begin by placing a patch over my left eye which I could almost see through. He then placed a device on my right eye and I was told I would see a red dot which I was to focus on.



Things happened quite quickly after that, they were ready to begin and Rodney told me to stay very still. Suddenly I heard one of the assistants behind me say "10 seconds" and then silence before hearing "3...2...1". When the count had finished the machine was pushed away and the flap had been created, I felt nothing.

They manoeuvred a new machine across my face, took a picture of the eye and proceeded to the next stage. This time it was the turn of the waveform laser to go to work, again the assistant said "10 seconds and then shortly "3...2...1".

Once this was finished I could see Rodney manually replacing the flap over my eye. This was mildly disturbing but over very quickly and totally painless. They quickly moved onto the second eye, swapping the patch from my left eye to my right.

The process was repeated and it was reassuring to hear them explain what was happening and counting down in short bursts, it certainly helped me to concentrate. I would estimate the whole procedure took only one minute per eye and when I sat up I knew immediately that it had been successful. My eyes were a little cloudy, due to the drops but there was clarity, if that makes sense.

I was asked to go back to the waiting room for a couple of minutes and then Rodney asked me to join him in a consultancy room. He asked how I was and gave my eyes a close inspection with a machine. Everything was fine and I was completely free of any pain (this was to be the case all the way through the recovery period as well).

I was soon joined in a small room by a junior member of staff and the recovery routine was explained. I was given a goody bag to take away containing eye drops and goggles to be used daily. The goggles were to wear at night, to stop me accidentally scratching my eyes in my sleep and displacing the flap.



*Oftaquix eye drops contain the active ingredient levofloxacin, which is a type of medicine called a quinolone antibiotic. Antibiotics are used to treat infections caused by bacteria. It does this by entering the bacterial cells and inhibiting a bacterial enzyme called DNA-gyrase. Putting the medicine directly into the eye allows the levofloxacin to act locally on the bacteria that are causing the infection.*



*Pred forte eye drops contain the active ingredient prednisolone, which is a type of medicine called a steroid. It is used for reducing inflammation. Inflammation occurs as a result of allergy or irritation and is caused by the release of substances that are important in the immune system.*



*Paracetamol is a simple painkilling medicine used to relieve mild to moderate pain and fever. Despite its widespread use for over 100 years, we still don't fully understand how paracetamol works. However, it is now thought that it works by reducing the production of prostaglandins in the brain and spinal cord.*

*One of the effects of prostaglandins is to sensitise nerve endings, causing pain (presumably to prevent us from causing further harm to the area).*

*As paracetamol reduces the production of these nerve sensitising prostaglandins it may increase our pain threshold, so we don't feel it as much.*



***Blink® Tears Lubricating Eye Drops** can bring you relief with every blink. Blink® Tears Lubricating Eye Drops advanced formula adapts to your dry eye needs for longer-lasting relief. It **replenishes** your tear film each time you blink.*

By now my right eye was starting to water a little and close. As I left the clinic I put on my cheap sunglasses and started to head back to the hotel, the wind was blowing in my face as I walked. I remember thinking how fortunate it was that my left eye was not also watering and starting to close, as I would not have been able to see at all.

When I arrived back I went to my room, I had been advised to get some sleep. Eight hours was the usual recovery time and that was best passed in an unconscious state. I didn't bother with the goggles a great deal as they were very uncomfortable and actually encouraged scratching. There were no rainbows on them, just trouble with the scanner!



I pulled the blinds down and turned off the light but just as I settled down the maid knocked on the door. I assured her it was best for her to stay and just clean the bathroom as I was likely to be in the room all day. After what seemed like an hour later I was just dozing off when the fire alarm sounded. I had not been made aware of any test.

After a long minute I swung out of bed and put my shoes on as it was time to investigate further. As I finished tying the second shoe it stopped and I returned to bed with a deep sigh. A further hour later and there was another rap at the door and as I was still awake I got up and answered. I was confronted by the cleaning Supervisor, checking that her staff had cleaned the room. I then resigned myself to staying awake for the duration and left the room to seek the sanctuary of the hotel bar.

My right eye had stopped weeping and as I was indoors, I had no need of the sunglasses. I sat chatting with the Spanish barmaid, eating a sandwich, with a glass of wine when my first real challenge presented itself.... I received a text.

Tomorrow I was due to meet up for Tony Saunders stag day at Sandown races and I was receiving some meeting instructions. The text appeared very clear and I was able to reply back straight away. The only delay in completing the message was actually due to my own clumsiness with texting (a pre-existing condition).

I had dinner at the hotel that evening which was very good once more. I chose a main course of grilled fillet of beef, dauphinoise potato & horseradish cream followed by the tiniest portion of chocolate mousse I have ever seen (it easily fitted on one small spoon).

**Hotel invoice**

19/08/10	Dinner	£40.50
19/08/10	George Wine	£9.50
19/08/10	Optional Service	£6.25
19/08/10	Accommodation	£125.00
20/08/10	Newspaper	£0.40
20/08/10	Breakfast	£17.00
20/08/10	Optional Service	£2.13
20/08/10	Accommodation	£125.00
20/08/10	Bar Food	£5.25
20/08/10	George Bar	£4.25
20/08/10	George Wine	£9.50
20/08/10	Optional Service	£2.38
20/08/10	Dinner	£32.50
20/08/10	George Bar	£2.50
20/08/10	George Wine	£4.75
20/08/10	Optional Service	£4.97
21/08/10	Breakfast	£16.50
21/08/10	Optional Service	£2.06
<b>Total</b>		<b>£410.44</b>

Once I had checked out of the hotel, I set off towards Oxford Street to buy some decent sunglasses. It would be good to actually put them on and look in the mirror before I bought them. I entered a big store and quickly found the Ray Ban display.

As the pair I chose did not have a price tag on them, I asked an assistant who was passing. The assistant was unsure so he asked his Supervisor who in turn consulted the internet. They could not decide on a price between £110 and £45 so I pretended to be in a rush.

If they could not decide quickly, I will have to look elsewhere, "I'm in a hurry" I declared. My strategy worked and as I paid the £45 the Supervisor went to the store room to retrieve the box. Upon her return she showed the case to her assistant with the £110 sticker. As I had already paid I headed quickly for the exit.

Fifteen minutes later, I dropped my bag off at work and headed for my 10:30 appointment (Saturday 21<sup>st</sup> August). This was to be my first check-up, one day after surgery. This time I was seen straight away and the diagnosis was very positive. I had inadvertently rubbed my right eye whilst resting at the hotel, out of habit more than anything else. I had even raised the goggles first! Although this was obviously a concern at the time, upon examination I was given the all clear. I was asked to read from the eye chart and I did point out that I could remember the sequence so it was difficult to give a true answer. I could remember for example that the first letter was an F and not an E. Well this fell on deaf ears and I gave an honest account as I possibly could (why wouldn't I?). I was told that the line I read was better than 20-20 vision so my eyes were healing nicely. The stag racing afternoon passed without incident and I was glad of the glasses as there was a lot of dust. Afterwards the darts team were driven by minibus to the WBCC club.

At the end of the evening I searched for my jacket but it was nowhere to be found so I left without it. When I returned on the Monday afternoon I got it back, minus my new sunglasses, which was poetic justice I suppose!

I must finish this piece by attempting to describe how my eyes have fared since the operation. It is quite difficult to describe and have it make sense as they have continually changed. The recovery was a lot more drawn out than I anticipated or was told it would be. I had further check-ups on the 31<sup>st</sup> August and 13<sup>th</sup> September where I described my symptoms and was told it may take up to three months to completely heal.

**After the operation...**I could see clearly but it did feel a little strange, it was similar to getting used to new glasses. There was no pain at all just the feeling that I had very thin contact lenses inserted (foreign body sensation). This must have been the eyelids rubbing against the scar tissue on the eye. I didn't bother with the goggles as they created a pressure around the eye which just encouraged rubbing.

**After one week...**my eyes were very dry at times, but the eye drops helped. I remember when I first threw a dart. My eyes were focussed on the board until I drew the dart back. Then they automatically focussed on the dart in my hand sending the board out of focus.

**After one month...**my biggest problem was the communication from my eyes to my brain. There appeared to be a fraction of a millisecond delay in focussing. It almost felt like I had to concentrate on the object. I think we all take autofocussing for granted so this was a little odd. The focussing issues were a result of the eyes healing at different speeds and this is quite common.

**After three - six months...**I was beginning to feel that the operation was good but not 100% successful. Optical express were still insisting I had better than 20/20 vision, however I was not totally convinced. There were some objects I expected to be able to see from a distance but they appeared just out of range. Concentration on computer screens led to very mild headaches at times.

**After nine months...**I am a lot happier now and everything is perfect. My eyes are a little tired at times but that is the result of spending too many hours in front of a computer screen. It may be ironic that my recovery was possibly hindered by writing about the operation! Still it could have been worse.

