A History of the Eye Department of Addenbrooke's Hospital, Cambridge 1879-1995

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The Start

There have always been more patients with eye disease than qualified people to look after them so the treatment of eye disease was part of the everyday business of all physicians until well into the eighteenth century. However, there were those who specialized in 'couching' for cataract from early Egyptian and Chinese civilizations. Hippocrates was probably the first physician who taught how to distinguish those patients who were going to benefit from couching and those who were not. For all other eye disease treatment usually involved damaging eye drops and salves (ointments). As a result blindness was a common problem.

In Norfolk and Cambridgeshire one such 'coucher' was Chevalier Taylor who, from about 1734, periodically left his home in Norwich with a flamboyant entourage and progressed round the kingdom doing operations for cataract. However, he planned his tours carefully to be sure that he was well away from the district before the complications occurred!

From the Middle Ages onwards general surgeons would expect to include eye operations in their armamentarium. However, in the early 19th century the Napoleonic wars were a great stimulus to the establishment of specialist eye hospitals throughout Europe as many of the troops returning from service abroad and especially from Egypt after the battle of the Nile were suffering from the combined effects of trachoma and gonorrhoea (Egyptian ophthalmia). In London The Royal London Ophthalmic Hospital was established in 1805, The Royal Westminster Eye Hospital in 1816 (both now amalgamated with The Central London Eye Hospital as Moorfields Eye Hospital). Similar specialized eye hospitals were established during the first half of the 19th century in Exeter, Glasgow, Birmingham, Manchester and in other large cities throughout the United Kingdom. This development however, did not affect Cambridge and in Addenbrooke's general surgeons continued to be responsible for the care of eye patients until the end of the century.

It was only because the burden of the number of patients with eye disease waiting to be seen at Addenbrooke's Hospital was so great that any eye specialists were ever appointed. In 1878 Professor Humphrey set up a committee to discuss whether they should appoint such a person. They did not agree to do so but rather 'to place ophthalmic cases under the care of one or other of their number'. As it happened in 1879 they were fortunate to include in the next round of general surgical appointments one George Edward Wherry who had been a house surgeon at Addenbrooke's and had become very interested in eye disease.

Mr. Wherry was 37 when he was appointed and one of his first actions was to open an eye outpatient clinic. As is always the case when a good service is provided it is rapidly overwhelmed, and by 1884 the accommodation was wholly inadequate for the 40 to 50 patients he was expected to see in the clinic. Even so it wasn't until 1897 that an 'eye room' was constructed. (Installing electricity cost 19 pounds and 1 shilling extra). In addition to his heavy workload and that of his general surgery he was made a lecturer in

the University in surgery from 1883 to 1911. As a member of The Cambridge Medical Society he presented 60 cases, 20 of those were eye patients but the rest were orthopaedic, abdominal surgery, gynaecology, urology and ear nose and throat surgery. Wherry left the hospital service during the First World War and in 1915 as a lieutenant colonel he became surgeon to the Eastern General Hospital.

By 1905 complaints from patients became so incessant that Mr. J.W.C.Graham was appointed a clinical assistant, and in 1909 Dr. Davies from Horton joined him. Both were general practitioners and both were well remembered in the city until the1960's. Mr. Graham lived in 22 Parkside and did his rounds in an immaculate carriage drawn by two horses with two footmen all of who wore green peacock feathers.(the coach house is still there) He was also reputed to have two of the most beautiful daughters in Cambridge!

In spite of the modest increase in staffing the overcrowding problem continued, to the extent that one Saturday morning in 1911 a hundred patients were waiting to be seen. Many of these patients were children who had been found to have deficient eyesight at school inspections, which had recently been introduced. By 1917 the problem became so enormous that the General Committee had to send letters to all practitioners saying that no further non-diagnostic refractions would be done in the hospital; a policy which still remains to this day.

The Foundation of an Eye department in Trumpington Street

Dr. Davies and Dr. Graham held the fort until almost the end of the war, when the first trained eye surgeon Mr. Arthur Cooke was appointed. When he left the army in 1917 Mr. Cooke was already 49 years of age. In his youth he had been a well-known athlete and footballer. He graduated from The London Hospital and then became a clinical assistant at Moorfields Eye Hospital, which, in those days, meant that he had surgical responsibilities. Whether he continued to do eye surgery whilst he was in general practice in Cambridge, from 1895 until the beginning of the war, is unclear. It is probable however that he did as he became FRCS in 1898, and was appointed surgeon to the hospital during the war in 1915.

From the time of his appointment Mr Cooke campaigned for better facilities for the eye department, which were eventually obtained by converting the old boardroom, a lecture room and Matron's bedroom into an eye ward. This took a long time to achieve but in 1932 this ward was opened. It was the last ward in the old hospital to be vacated in 1977, and consisted of 3 separate wards of thirteen beds with an 'up to date operating theatre'. Before this inpatients had been nursed in the general wards and cross infection was so common that 9% of eyes were lost after operation. At the same time that the eye ward opened Dr. Whittle started to do routine bacterial cultures pre-operatively. This reduced the enucleation rate at once to less than 1%, a very low figure for eye operations at the time.

In the late 1950's techniques of cataract surgery changed. No longer were patients kept in bed for 7 days with the head sandbagged to prevent them moving, but they were allowed out of bed after 2 days. This caused a crisis because not only was the eye ward in the old hospital cramped but the toilet facilities were shocking! In order to make some improvements the eye ward had to be closed and all the problems which caused the eye ward to be established in the first place recurred.

Miss Mima Puddicombe was appointed matron to Addenbrooke's Hospital in 1958. She had been theatre sister in University College Hospital throughout the blitz. After the war she had, among other things, worked in the eye theatre and wards at University College Hospital. During this period she worked in theatre with Henry Stallard who visited from time to time. Mr. Stallard was far ahead of his time in his approach to sterility, theatre etiquette and surgical accuracy and skill. This had a strong impression of Miss Puddicombe. When she came to Addenbrooke's she found that 'not only were the diagnostic, operating and treatment areas for the eye patients extremely deficient, but the ward areas were cramped and the toilet provision were still shocking. In order to make some urgent improvement the eye wards had to be closed for some time. Where could the patients be accommodated? At a medical meeting other consultants did their best to be generous, offering a few beds here and there. However, when the Queen opened Stage I of the new hospital Ward A1 had not been commissioned. This provided the answer. Since the number of beds in the ward was the same, the ward treatment room (infinitely superior to the Old Site theatre) could be used as the eye theatre. So they were all moved, lock stock and barrel! Alas, when the alterations were completed and Ward A1 was needed for minor surgery they had to go back to the "Old Site" again.

The 'up to date' operating theatre was in use until the 1970's. It measured only 14ft by 9ft and as there was no anaesthetic room or recovery room, both activities were expected to take place in the adjacent ward or the corridor. Into the theatre had to be fitted an operating table, an anaesthetic machine, trolleys and numerous people. It was widely rumoured that if matron had to appoint a theatre nurse for the eye department she would have to be measured first to make sure she could be accommodated in the theatre! Added to this was the instruction that nursing staff could not wear nylon underwear because of the risk of explosion from anaesthetic gasses. It is a wonder anyone ever came near the Eye Department. This operating theatre was so small that when the 'light coagulator' was obtained to treat retinal disease the huge xenon light source had to remain in the corridor and the rigid pipe from the machine passed through a hole in the door to reach the patient on the operating table. At that time the hospital worked on a 110 volt system so that introduction of a piece of equipment which accommodated the same lamp as that used in lighthouses caused many headaches. Even then they did not get it right because the first time the light coagulator was turned on all the lights in Trumpington Street went out! The changing room for the theatre was in a painted glass darkroom and the eye staff held competitions as to who would be found to be wearing the brightest coloured underpants!

As the various departments moved to the new site a general theatre, Theatre 3, was eventually vacated and the eye surgery moved into this refurbished theatre. It was not without its problems. One Wednesday afternoon when Mr. Scott was operating a

worker was given a chit to go up into the roof to remove rust which had accumulated on the inner surface of the ventilation duct but nobody had thought to check whether anyone was actually operating at the time! The ventilation system was switched off following which he heard banging in the roof. After about half an hour the ventilation system was re-started and a fine shower of black metallic dust came down and covered everything in the theatre, including the nun whose retinal detachment who was being operated upon at the time. No harm came to her, perhaps demonstrating the power of prayer! This was the summer of 1976 and the temperature in the theatre rose to the 90's and the air conditioning broke down as a result. The theatre was closed forthwith and the whole Department moved to the New Site within 24 hours. Fortunately there was a spare operating theatre in the main theater block, Theatre 10, which remained the eye theatre thereafter

Curiously enough, when the new hospital was opened by the Queen in 1962 the new neuro-surgical wing was not being used, so the Eye Department took over ward A2 and converted the treatment room of the ward into an operating theatre. This enabled the Department to have the luxury of a ward clerk and a theatre porter, and the thin, wiry, efficient and forceful Sister Brown was able to recruit more eye trained staff. At that time if you wished to know what went on in any department of the hospital the thing to do was to ask the front door porter or Margaret Huntley, the ward clerk for 30 years. It was from these sources that it was learned that the department was about to move again as a neuro-surgery department was to be commissioned. It was planned to move to Douglas House but this never happened and everyone returned to the old Cooke ward in Trumpington Street and back to the sad old times when the day case patients sat in the corridor whilst those who had just been operated up were wheeled past!

At this time Sister Brown, who had looked after both in and outpatient department, moved to Bath and Amy Pullman (the best nurse I ever met) became full-time sister to the in-patient department, where she remained until she returned to her native Belfast. During this period many plans were made to extend the wards but it was pointed out that the only thing which kept the whole hospital together was the old, original Addenbrooke's house – exactly the site of the eye ward. If any wall had been removed or changed then the whole hospital would have imploded!! There was therefore no choice but to move out, and this was to Newmarket Hospital.

Newmarket Hospital

Newmarket Hospital was wartime Emergency Medical Services Hospital with separate wards, an administrative and a theatre block. It had an administrator, a medical superintendent, who was also one of the anaesthetists (Dr. Robertson) and a matron. The place worked like clockwork in spite of the many difficulties, such a moving patients long distances in the open before and after the operating sessions. Many of the staff were ex-jockeys and the patients seemed to be lifted on to the operating table as if by magic as the porters had to carry them almost above their heads! Horses had priority in Newmarket. A horse jumped a roadside fence and landed on Sister Bradley's car, causing considerable damage. The newspaper report read: 'Valuable racehorse damaged by car'.

On another occasion Dr. Robertson, seeing a houseman whose theatre pyjamas had the front open, told him ‘You may work like a horse but there’s no need to look like one’! The only serious problem with ocular infections ever experienced in the eye department occurred at Newmarket. A portable operating theatre was borrowed from the army whilst the hospital theatre was being refurbished. Unfortunately the operation theatre, which had a rubber floor, was placed on a piece of ground which held the water. This water became infected and the organisms bypassed the filter systems because the ventilation system had not been ‘uncorked’ when the unit was installed. It took a great deal of detective work to find the cause! Eventually adequate space and a new ward was allocated again at Trumpington Street together with the reorganized Theatre 3, with its own theatre sister, Liz Irvine who was eventually replaced by Sister MacMillan who stayed with the department until 2008 ensuring that only the best is good enough for eye surgery.

In patients at Hills Road

In 1984 the move to the New Site took place with Sister Evans, who was in charge of the ward for 17 years. Rosemarie Holmes, who had been a staff nurse on the eye ward, then took over Ward C4. This ward and Theatre 10 became the home of the eye department except for one short episode.
The type of care required by the patients altered dramatically in the next two decades. As we have seen until the 1950’s no sutures were used in the standard operations for cataract extraction. As a consequence patients needed full nursing care, they could not move, their eyes were double-padded for up to 10 days and so they had to be fed and helped to do everything. Even then there were occasional disasters. Suturing was introduced and became more and more satisfactory with the development in technology and so the regimes relaxed. The patients only had one eye covered and were allowed out of bed after 2 days. In the 1970’s techniques changed again and cataract extraction became a safe and highly successful procedure. As a consequence the patients were out of bed quickly and went home almost immediately after surgery. Nowadays the techniques have changed yet again so that the operation can be accomplished through a very small incision. This makes it possible to do cataract extractions and most other procedures as an out-patient All the other surgical procedures, even corneal transplants and retinal operations have undergone similar advances resulting in shorter and shorter stays in hospital The result of these changes on the ward staff is enormous and the sisters and nurses now have to manage a very large throughput in a very short time. That Sister Holmes her successors and their staff can continue to do this is nothing short of miraculous.

Medical Staff of the Eye Department

In 1932, just before Mr. Cooke died in harness, Mr. E.G. Recordon, who came from St. Bartholomews Hospital and Moorfields Eye Hospital in London, was elected honorary surgeon to the ophthalmic department at the age of 28, remaining there until he died of an

myocardial infarct in 1957. Apart from being a highly competent ophthalmic surgeon whose survival results were exceptional, he was a great collector of art and antiques. He had a Boudin over the fireplace of his consulting room and a Picasso in the waiting room! He kept the hospital, to which he cycled every day, and his family affairs quite separate. In fact his children remember the hospital only as a place beautifully decorated for Christmas and their father as the one who showed his surgical skills only through the use of a carving knife on the Christmas turkey. During this period there was a very close link between the consultants at the hospital and those in the University. Although there may have been no official university appointments the consultants participated fully in the university, and in Mr. Recordon's case, the life of St. Johns College.

At the very beginning of the Second World War when the hospital was more or less mobilized intact Esmond Recorden went to France, to return at Dunkirk. Later, in 1943 he was recalled from North Africa because Mr. William Glasse Watson the ophthalmic surgeon appointed temporarily during the war, became ill. Mr Glasse Watson's memoires and his amazing experiences during the war are attached to this paper, but examples of his craftsmanship and instrument making were still being used in the eye department 20 years later.

Miss Marjorie Perrers Taylor was appointed temporary Honorary Assistant to the Ophthalmic Department when Mr Recorden went to France. She was actually appointed to await his return but after this for reasons that are now unclear, she continued to run her own independent eye department in the Department of Radiotherapy so that for a while Addenbrooke's had two separate eye departments. In the Department of Radiotherapy she worked with Professor J.R. Mitchell on the ocular effects of radiation, particularly on the retina during the treatment of sinus cancer. This work is still taken notice of to this day. She was known for being extremely strict with colleagues and patients alike, many of whom followed the routines she gave them from childhood to the grave, so well did she instill her disciplines.

After the war the hospital shrank in size from its peak under the military of 811 beds to 358, but the flow of local patients with eye disease increased. Waiting lists began to rise so a second ophthalmic surgeon, Mr. Graham Wright, was appointed in 1947. He had been trained at Moorfields and St. Mary's Hospitals, and had served in the Army throughout the war. He played tennis every day and as a consequence worked an unusual schedule. Shortly after his appointment he started to spread the area from which Addenbrooke's hospital drew patients and established eye clinics in both Huntingdon and Stamford.

Outpatient examinations at that time were extremely superficial for those patients who did not have a complicated problem. The eye surgeon would be stationed at an upright desk of the type often used by office clerks in the 19th century. The patients would be summoned from a large open hall to the desk where they were interrogated in full view of the assembled company, which often could be as many as 50 people. The complaint having been heard, the eye would be examined with a torch and a magnifying 'loupe', and if necessary a hand held ophthalmoscope was used in an adjacent dark room. Until

the early 1960's the outpatient examination was held in the hall of what is now Brown's Restaurant in Trumpington Street, and the dark room being in the pillared entrance lobby, a gloomy spot indeed in those days! This method of consultation with patients may not have been very friendly for the patients but was an efficient way of coping with the huge workload presented to very few trained staff. A large number of patients were seen, very little serious pathology missed and both doctor and patient suffered the system with remarkable humour. It was a very rare day that there was not a great deal of laughter at one or other of the desks. This may have had something to do with the fact that this clinic was shared with the gynaecologists, who must have had much more trouble with personal conversations. As far as the eye patients were concerned, if there was a difficult problem to be sorted out they were sent into the dark room where they spent the time in inky blackness waiting for their pupils to dilate until one of the surgeons had the time to go into their problem in detail. This could, and did, take several hours for some of those who had not had access to care of any kind for several years, which was not uncommon at that time. The overriding impressions of the patients were of excellent care in spite of difficult circumstances. Mr. Recordon's son, in the year 2000 was greeted by a senior porter at St. Johns with 'you will be the son of the eye surgeon at Addenbrooke's'. He then told him of his gratitude to his father who had operated on him a few days before he unexpectedly died in 1957.

As more sophisticated examination techniques became available and more could be achieved for everyone, the desk system of examination was abandoned. The inevitable and immediate consequence was that more doctors were required to see and treat the same number of patients. This was happening all over the country and whilst more surgeons were being trained there were still not enough to go round and outside London there were very few places set up to train these doctors. Nevertheless, during Mr. Esmond Recordon's time there were a few ophthalmologists who received their registrar training in ophthalmology in Addenbrooke's, including Mr. Peter Beattie who became a consultant ophthalmologist in Norwich and Mr.Guy Siggins who took a similar position in Birmingham.

Mr. Recordon was replaced by Mr. Wallace Foulds, a graduate of Glasgow University who took up his appointment from University College Hospital in London. Having been one of the first surgeons in the country to have completed a full formal training programme he became a crusader for formal surgical training in ophthalmology He pursued this crusade until The Royal College of Ophthalmologists was established, becoming its first President..

Mr. Foulds' appointment in Cambridge was for only five sessions per week so he continued to work part time as a researcher in The Institute of Ophthalmology in London developing the first useful animal model for rhegmatogenous retinal detachment.. Within the allocated five sessions Wallace Foulds was expected to go to Stamford on two different days each week and run monthly clinics at Papworth, leaving very little time to provide a service for Cambridge. After a heated discussion with the then CAMO of the East Anglian Regional Health Board it was agreed that the clinic in Stamford would be

relinquished and a weekly clinic established in Saffron Walden; a link with Addenbrooke's that still persists.

The eye department had to function without the help of junior medical staff, other than a pre-registration houseman shared with paediatrics. With the support of Mr. L. Paine, the Hospital Administrator, who was in the privileged position of being able to give an immediate yes or no answer to any proposal put to him, the house-surgeon was upgraded to Senior House Officer, but still shared with paediatrics and a full time Registrar was also appointed. Additionally an extra Clinical Assistant, Dr. Henry Backhouse was appointed to help Graham Wright in Outpatients and to aid Wallace Foulds in Saffron Walden. Henry Backhouse who had been a medical missionary was largely instrumental in the establishment of the Y.M.C.A.in its present site in Cambridge. He later became heavily involved in missionary work in Jerusalem. Wallace Foulds drove Henry Backhouse to the clinic in Saffron Walden every week and had the benefit (perhaps not fully appreciated at the time) of a weekly discourse on religion, ethics and philosophy!

Another outpatient assistant at the time was Dr. Kodicek, a refugee from Prague who had worked in the eye department since she came to Cambridge with her biochemist husband. She was not only an efficient and hard working ophthalmologist, but a very sympathetic doctor and a generous hostess. She died aged 100 in 2009. When she retired her replacement was a Dr. Richard (Dickie) Bird who had also previously worked with Esmond Recordon. He was artistic and a novelist but developed personal problems, not a few of which were related to the greatly increased workload that had developed in Addenbrooke's since he had previously worked there. Sadly things became too much for him and, tragically, he took his own life.

Shortly after arriving in Cambridge Wallace Foulds rented a house in Huntingdon Road which was owned by the Russian Embassy. It had been built by Peter Kapitza, a Fellow of St. John's College, who became President of the Soviet Academy of Sciences and is credited with having been responsible for the development of the hydrogen bomb in the Soviet Union. Kapitza worked with Rutherford and was the inventor of the heat pump so the Foulds family found a house so hermetically sealed that it was impossible to close the front door without opening the letterbox! The workload cannot have become less because it was widely reported in Cambridge that Foulds had to tend his garden at night by floodlight as there was not enough time during the day! The workload was indeed a very serious problem. Two surgeons were not sufficient and there were soon 600 people waiting to have their cataracts removed. To deal with this large number of people an extra ward exclusively for cataract patients was established at Douglas House and continued there for two years. The large number of cataract operations was of inestimable training value to a very overworked registrar, Mr. Indra Roya, who was subsequently appointed to a Chair in Calcutta. Cataract initiatives are not new; the difference here was that there was no extra payment for the extra work; a sign of changing times perhaps! The anaesthetist at that time was Dr. Aileen Adams, so the future presidents of their respective Colleges were working together.

When the new Outpatient Department opened at the New Site (as it was then known) by Her Majesty Queen Elizabeth, changes could occur. The clinic a Stamford, run up till then by Graham Wright, was taken over by Peterborough and a new clinic at Hills Road occupied. This was still very small and had to be shared with gynaecologists and urologists but at least they were now on the other side of the corridor! The plans for the eye department had been drawn up many years previously and were based on the same open plan arrangement as had been in place in the old Addenbrooke's.

Architects and clients do not like changing designs in the middle of a project but the design submitted for the eye department was so obviously unusable that it had to be altered. Changes suggested at this time were accepted after a great deal of discussion, provided one wash basin was left where it was planned! As the clinic is south facing and black blinds cover the windows this acts as a black body radiator making the clinic unbearably hot in summer. In spite of repeated attempts to persuade the administrators that the installation of air conditioning was a necessity, the ophthalmologist's pleas fell on deaf ears (of those who did not have to work there!) This part of the clinic has not been structurally modified since so everyone there is still suffering from the administrative decisions taken in 1962 and earlier.

Arising from his connection with the Institute of Ophthalmology, London, Mr. Foulds on one occasion was approached by Professor Dartnell who was writing a book on the visual pigments to see if there was any possibility of obtaining a fully dark adapted human eye for study. Shortly afterwards a young man came to the clinic with a small malignant tumour in one eye. At that time removal of the eye was the only treatment. With the patient's consent and co-operation the affected eye was kept totally occluded for two days and subsequently the eye was removed in almost total darkness, not an easy procedure. The eye provided the greatest amount of visual pigment ever extracted from a human eye and formed a whole chapter in Dartnell's book.

Towards the end of 1962 Mr. Wright developed a watering eye. A biopsy of the associated lump proved to be a lymphoma which progressed in spite of treatment. He continued working until a few months before his untimely death in 1965. Almost at the same time Mr. Foulds became Professor in Glasgow so two new eye surgeons were appointed, Messrs. Cairns and Watson. Both these surgeons had worked their apprenticeship together for several years at Moorfields Eye Hospital. Mr. John Cairns had worked thereafter at St. Bartholomew's Hospital and Mr. Peter Watson as Senior Lecturer in the Department of Ophthalmology under Professor Barrie Jones at Moorfields. Mr Watson continued to have a combined appointment with Moorfields Eye Hospital to study scleral disease for the rest of his career.

Both surgeons had been strongly influenced by one of the master surgeons of the day, Mr. Hillal (Henry) Stallard, who had been an Olympic runner, as any slightly overweight or unfit houseman soon realised to his cost. He took part in the race round Trinity Great Court made famous in the film Chariots of Fire. One of Henry Stallard's main interests was in the surgical management of glaucoma for which he had devised a highly complicated operation which worked very well. Much discussion between the two

surgeons and the registrar took place in The Little Rose pub in Trumpington Street as to how this operation could be improved. This eventually led to the much simplified and highly effective operation of trabeculectomy. Since the first provisional paper was published in 1967 this operation, in one form or another, trabeculectomy has remained the standard procedure for the surgical management of open angle glaucoma to this day.

Huntingdon County Hospital had continued to be served by the consultants from Addenbrooke's, initially by Mr. Graham Wright and later by Mr. Peter Watson. As in Cambridge the number of patients waiting to be seen increased rapidly and although Huntingdon and Godmanchester were small towns in the 1960's all the neighbouring practitioners sent patients there. One of these general practitioners was Dr. John Sibthorpe, who came to help as a clinical assistant and shortly thereafter left general practice to become a full time ophthalmologist. Being a Huntingdon resident his help was invaluable and he dealt with all the minor surgery from the region at an operating session at the County Hospital as well as helping in the Addenbrooke's clinics. This arrangement continued until Hinchingbrooke Hospital was built and its own consultants appointed.

As there was only one official clinic a week at Huntingdon County and the accommodation was in the war time hut by the gate of the hospital, which is still there 50 years later, people often had to wait outside before they could get into the hut to be seen! On one occasion on returning from a very busy clinic in Huntingdon one of the house surgeons from Addenbrooke's helping there, Sandy Holt-Wilson, noticed that he was being followed by an unmarked police car. As he was already late for the start of the Addenbrooke's clinic he decided to keep going. He turned into the staff car park at Hills Road and the police car drew up alongside. Sandy started to head for the clinic and a voice said 'Excuse me sir, are you Australian?' 'No' replied Sandy. 'Oh, I thought you were the flying doctor.' The policeman then gave him a good dressing down before allowing him to go.

. A large number of the house surgeons and registrars came from Australia and South Africa. They were always a breath of fresh air, enquiring, hardworking and hard playing. One of them, Justin Playfair, married a ward sister from Addenbrooke's and removed her to Sydney. All medical staff could always be brought to heel with 'the chair'. This stool, inherited from the earliest days of the eye department, consisted or a seat set on top of a large spring. It could be placed in front of the slit lamp microscope: an unwary or over-confident doctor would be asked to examine the patient – the spring bent under his weight and he could be placed in a very undignified position to order!

In 1966 and in co-operation with other regional consultants it was decided that a regional retinal service should be set up. John Scott was appointed to develop this service and took up his post in June 1967. As the workload expanded a further consultant was required and John Keast-Butler was appointed. In 1979 the results of a multi-centre study into the treatment of diabetic retinopathy with photo-coagulation was published and concluded that much blindness could be prevented by this form of treatment. As a result it was decided that the diabetic laser work should be transferred from the retina clinic and

Declan Flanagan took over the care of the diabetics in addition to his consultant post at Hinchingbrooke Hospital which was being built in Huntingdon to replace the old County Hospital. This effectively replaced the service that Peter Watson had provided for many years at Huntingdon Hospital.

During this period many of the surgeons training in ophthalmology in the Royal Air Force spent their senior registrar period at Addenbrooke's and subsequently enabled a flourishing eye department to be established at the Royal Air Force Hospital in Ely. These surgeons added an extra dimension to the Department whilst they were there and also took from it not only knowledge, but the occasional wife. Robert Lamb and Kerry Jordan became consultants at Bury St. Edmunds and Peter Black at Yarmouth and Stephen Vardy at Peterborough. The first of these senior registrars was Derek Brennan, who left to join the experimental section of R.A.F. Farnborough, and was always accompanied by at least one Great Dane. These animals must have cost him a fortune because they would always go through a glass door rather than round it – even one at Addenbrooke's when he escaped from the car!

In 1985 John Cairns became ill with leukaemia and after a long battle, sadly died. The search for his replacement offered an opportunity to change some of the sub-speciality interests within the Department. With the appointment of Anthony Moore, who had an interest in genetics as well as in paediatrics, it was possible to concentrate the care of children into one area of the Department so that John Keast-Butler was able to develop his interest in general ophthalmology. Peter Watson, whose interests were not only in the cornea, sclera and in surface disease of the eye, but also in glaucoma, took over the care of the glaucoma clinic. The expansion of the population in Huntingdon required a second appointment at Hinchingbrooke Hospital. Nicholas Sarkies was appointed and his responsibilities there were general and included running the glaucoma clinic. As his main sub-speciality interest was in neuro-ophthalmology it was possible to establish a much needed service in this area at Addenbrooke's.

The next significant event was the retirement of Peter Watson in 1995 who was subsequently to become Böerhaave Professor in the University of Leiden. It was fortunately possible to make two appointments for this replacement, Malcolm Kerr-Muir was appointed to take over the corneal and ocular surface disease work and Nick Sarkies extended his Hinchingbrooke activities to Addenbrooke's with another responsibility, that of running the glaucoma clinic.

Ophthalmology has always had a strong non-surgical medical component. Dr. Paul Meyer had moved from an SHO appointment in the Department to take up a Wellcome Fellowship, beginning a research programme in medical ophthalmology and also providing a medical ophthalmological service to the clinic, caring for patients with inflammatory eye disorders referred by local consultants. After eight years of this Fellowship funding was withdrawn, but it was possible to appoint Dr. Meyer as a Consultant in Medical Ophthalmology. With this appointment medical ophthalmology has expanded very considerably providing a service not only to referred patients from the

Addenbrooke's clinic but also to patients from other departments and from other hospitals throughout the United Kingdom.

With yet further expansion in the population of the Huntingdon district a further consultant was required for Hinchingbrooke Hospital. Mr. Cornelius René, who took up this post, was able to fill the gap in the subspecialities by providing a service in ocular-plastic surgery at Addenbrooke's.

Even though the patients with diabetic eye disease were now treated in a separate clinic, the demands on the retina service increased progressively; particularly as a consequence of the change in practice that consultants in the surrounding district general hospitals began to refer primary retinal detachments to Addenbrooke's. This put increasing strain on the emergency retina service and it became clear that a second retinal detachment surgeon would be required. Martin Snead, who had trained with John Scott for several years, was appointed. Over the years all these facets of eye care have become more and more sophisticated and, as a consequence, each procedure more time consuming. This trend is likely to continue, particularly as some forms of macular disease (one of the major causes of blindness) are becoming treatable. By 1995 there were 8 surgeons, each with their own sub-speciality interest, so clinic space again became a problem. The clinic had to increase in size. Even then it was not large enough to accommodate the increasing number of people and equipment required.

The Staff of the Out Patient department

Until the move to the New Addenbrookes took place the out patients clinics were organized by Amy Pullman who was also the Ward Sister . Thereafter a sister was appointed whose sole responsibility was the out patient service. This included not only the nursing and minor procedures but also helping with visual fields in the glaucoma clinics and many other non nursing tasks Jo Isaacs, the Sister in charge, did this and had the unenviable task of maintaining the very high standards of nursing care in the then not too ideal accommodation within the eye clinic. She and her successor Lindsay O'Shea, who retired in 1998 continued to do this and always gave not only expert care and hands on expertise, but have also successfully comforted and encouraged many patients who will always remain grateful to them.

Sub-specialisation was the next major change to affect the eye department. The first to be affected were the children. Until well into the 1960's children were nursed in the female ward in the old Addenbrooke's where they were mothered by all the other patients. Eventually, under pressure from the paediatricians they were moved to the paediatric wards where they had as companions children with malignancy undergoing chemotherapy and so on, and were a lot less happy and perhaps no better looked after from the ophthalmic point of view than previously. In the outpatient department orthoptists became heavily and less controversially involved in their care. One of the first four orthoptists ever trained was Lorna Billinghurst, the head orthoptist at Addenbrooke's until she retired. Lorna was a great character, well known in many Cambridge circles,

and as she herself had a bad squint and no binocular vision she certainly had a great deal of sympathy for her patients!

The Second World War established orthoptists as a profession in their own right as it became essential to ensure that all those capable of using their vision did so. After this work with children, treating squint and preventing amblyopia became the main concern. In 1966 Lorna Billinghurst was joined by Fay Barnet, the wife of a veterinary ophthalmologist. From 1917 school eye inspections had identified eye disorders in children and a local authority eye clinic had dealt with these children at a clinic in Auckland Road. It became clear that this was not adequate and that detection of visual defects was being made too late to influence the rehabilitation of vision. To enable children to be seen at a younger age a mobile clinic was built in a specially converted van to go to schools and infant welfare clinics. This was the first such unit to be established anywhere and many children in East Anglia owe their good vision to the establishment of this service. The mobile clinics continued for 10 years, the van getting older and more battered as it toured the fens driven by orthoptists large and small. One diminutive orthoptist, Heather Madley, had to look through the steering wheel giving the appearance of a driverless vehicle which could have appeared in 'Harry Potter'! After the gates of Girton School had been effectively demolished in front of the headmistress of the school, a few cars dented and the vehicle no longer roadworthy, it was decided that fixed clinics in the outlying areas would replace the juggernaut! The great advantage to those doing the work was that they no longer had to go home with patients to get to a toilet!

The importance and value of the orthoptic service gained it full recognition and has under its head Diane Moore and clinical and clinical tutor Julie Moore, becoming a national teaching centre for university courses in Liverpool and Sheffield. Not only has much original orthoptic research emanated from the nine orthoptists, but also Fay Barnet and Val Parker have contributed to many glaucoma research projects.

Improving techniques, an increased understanding of the underlying pathology and, as a consequence, of the ability to treat eye disease, changed the practice of ophthalmology very rapidly in between 1960 and 1990 corneal surgery was one area which advanced very rapidly but concurrently there was an equivalent advance in contact lens techniques. Mr. Tony Shephard was a master of these techniques and he, along with his assistant Ali Akay became an integral part of the corneal clinic.

Unfortunately there are still some conditions which cannot be treated or in whom treatment fails. The responsibility of the eye department is still to help these people together with such excellent organizations, such as Cam Sight and the local Blind Welfare Service. In the eye department itself volunteers helped those in a similar situation to themselves and for a period Debbra Mortlock, herself partially sighted, was employed to ensure that they were well looked after. She was replaced by Margie King. Many people with poor vision can be helped by being provided with various forms of aids and magnifiers and Kevin McNally has for many years brought his expertise and sympathetic approach to this problem.

With the establishment of trabeculectomy as the treatment of choice for refractory glaucoma the glaucoma clinics had to be completely re-organised. The measurement of visual fields became very sophisticated and intra ocular pressure measurements accurate and capable of being performed by non-medical staff. It then became possible to see a larger number of patients with the help of additional appointments of clinical assistants (including Susan Yealland the wife of a consultant neurologist at Addenbrooke's and an authority in her own right on archaeological osteology), the orthoptists, nurses and others. It was also possible to develop sub-speciality clinics in corneal disease at this time. These clinics are all staffed by residents in training and clinical assistants but it is the cohort of clinical assistants who are the back bone of the eye outpatient department. House surgeons and registrars have to learn fast, and do so, but they come and go and often depart just when they are becoming really useful in the department. It is the clinical assistants who keep the clinic working. Kathryn Petrie, Fiona Griffiths, Pat Bateman, Antonia Gilmore and Rosalind Herrtage have combined the organization of a family (and even bee keeping) with a demanding job in the eye clinic.

The other unsung heroes of the eye department are the clerks, those who undertake the difficult, vital and impeccably executed note preparation, receptionists and medical secretaries. Joy Bennetton (now McCombie) and Diana Harrison (now Scott) were the first dedicated secretaries to the eye department and the only ones ever regularly to consume a Mars bar a day! When one of them left she was replaced by two others who threatened to depart after 24 hours because of the enormous pile of work. They were persuaded to stay and did so for a further six years and so it has been with many of their successors. Carol Pearson was the booking receptionist who controlled the clinic for the best part of 20 years and mothered the multitude of visiting foreign and commonwealth doctors who visited the department

Research

The links with the University have always been tenuous. Cambridge is the only major University which does not have or has never had an academic Department of Ophthalmology even though this was recommended by the Medical School in the 1970's. In spite of this a great deal of research has been undertaken aided very much by the huge patient throughput and the willing help given by other University departments, the Departments of Pathology and Genetics and in particular the Strangeways Research Laboratory. This work has included the radiotherapy to the orbit (Perrers-Taylor), intra ocular pressure and anesthetic agents (Foulds and Adams), Trabeculectomy and other problems in glaucoma (Cairns and Watson), Silicone oil treatment of retinal detachment and cataract formation (Scott), Immunology and Pathology of Corneal Transplant Rejection, Ciliary Body Transplantation (Watson), the Genetics of Stickler's syndrome (Snead), the Genetics of numerous eye disorders in children (Moore and his team), Anterior Segment Angiography and Haemoglobin Imaging ,The care of Inflammatory eye disease (Meyer), the Management of Destructive Corneal and Scleral disease (Watson and Hazleman). Three books have emanated from the Department and numerous chapters for other books as well as many papers in refereed scientific journals. In one

year more papers appeared from the eye department than any other individual department in either hospital or University Medical School.

The pressure of overwhelming numbers of patients has been over the years the glue which has held the Department together and which produced such intense loyalty from the nurses, ward clerks, the porters, the technicians, the secretaries, the orthoptists and the doctors, most of whom have spent their working lives there. Times have changed and will continue to do so with the increased sophistication of technology. Nevertheless it is to be hoped that the good humour, comradeship and social interaction which has always been such a strong feature of this Department will always continue to everyone's benefit;

Consultant Staff of the Department of Ophthalmology Addenbrookes Hospital

1879-2000

1879 to 1905	George Edward Wherry
1905 to 1921	J.W.C.Graham
1909 to 1919	G. Davis
1917 to 1932	A.Cooke
1932 to 1957	E Recorden
1939 to 1942	WGWatson
1942 to 1960	M. Perreres Taylor
1947 to 1965	G. Wright
1959 to 1964	W.S.Foulds
1965 to 1985	J.E.Cairns
1965 to 1995	P.G.Watson
1967 to 1998	J.D.Scott
1972 to 1998	J Keast Butler
1987 to 2008	D.W.Flanagan
1990 to 2000	A.T.Moore
2000	P.Meyer
2001	M.Snead

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