THE INAUGURAL EDDIE DONALDSON MEMORIAL LECTURE

Delivered by Dr ABL Hunyor on Saturday 17 August, 2002

Mr Chairman, Ladies and Gentlemen, it is a great honour and a privilege to have been asked to present this, the Inaugural Eddie Donaldson Memorial lecture. It marks the fiftieth anniversary of the founding of the Retina Unit at the Sydney Eye Hospital, the first in Australia. I hope that the following historical account of Eddie's association with and contribution to the hospital, to Ophthalmology and to the wider community will serve as a fitting memorial to a great man.

I am grateful to Eddie and Bill Deane-Butcher, both of whom were kind enough to record their reminiscences of their early days at the Eye Hospital when the Alumni Association was founded in 1996. Much of the historical material comes from their notes.

Edgar John Donaldson AO, Eddie to all who knew and worked with him, was born in Toowoomba and died in Sydney in the last year of the twentieth century in his eightieth year. He was undoubtedly one of the giants of Australian Ophthalmology in the 20th century, and a wonderful human being. The founding of his beloved Retina Unit marks the beginning of subspecialisation in Ophthalmology, at a time when some specialists were still designated as Eye-Ear-Nose and Throat Surgeons.

Eddie was our first true-blue Alumnus, having started his association with the Eye Department of Sydney Hospital, the first of the then great teaching hospitals in Sydney, in 1941, when he attended for his student term in Ophthalmology. The Eye Department was housed in Wooloomooloo in the Coffee Palace, known as Pacific Mansions and acquired by Sydney Hospital in 1922.

In his Junior Resident (Intern) year, he was rostered to do a term, in what was in 1943 commonly referred to by hospital staff as the Eye "Dump". The grateful people of Sydney however came to know it as the Eye Hospital. Residents did not consider the eye term desirable, and especially during the Second World War, when many of the Honorary staff were on extended war leave, there was little supervision and no teaching. There was at that time no postgraduate teaching programme, and overseas tuition for Australian

graduates, which had been almost entirely in Great Britain, was not possible for any medical specialty until after the war.

Two residents were rostered at any one time to the Eye Department, and worked with almost no supervision. The Senior resident allocated to supervise them had usually done no Ophthalmology and worked at Sydney Hospital, coming down only once or twice a week, and after tea with the matron, satisfied that all was well he would return to the safety of the main hospital.

That there were so few disasters, could be ascribed to the fact that this was the era prior to the availability of antibiotics and steroids, and most of the extemporaneous drops prepared in the dispensary, although they did very little good, at least did no harm. It was also a time when patients accepted that the doctor was doing what he could in their best interests and there was no thought of litigation if the result of treatment was not up to expectations. There was of course little of what could be called "informed consent" and generally patients were accepting of the doctor's advice, asked few questions and had implicit faith that the best was being done with little likelihood of financial considerations playing any part in medical decision making.

At that time 12,000 patients attended the eye casualty department annually. Each afternoon three Honoraries attended the outpatients clinic and all worked in one large room, from 2 to at least 6.30 pm with each Honorary allotted 8-9 refractions as well as the usual outpatients - there were no refractionists. The Honoraries were very adept at quick refractions, the use of monocular and binocular loupes and some, at monocular indirect ophthalmoscopy. The only elderly Zeiss slit lamp was on the second floor, awaiting repair!

Sydney Hospital, the first in Australia, was uniquely governed by the Sydney hospital Act, and until 1959 all work, including all surgery, was done entirely on an honorary basis. This placed a big load on the junior Honorary staff, who at this time were doing two outpatient clinics a week and an operating session every week or fortnight.

The dedication of the Honorary staff was remarkable, considering the enormous work load, poor conditions and lack of payment for any service. Although the situation at other hospitals was far better, few left the staff when vacancies arose elsewhere. The attitude of the Honorary Staff was a major strength of the future Eye Hospital in its early days.

The day to day running of the Department was left to the matron, and the superintendent of Sydney Hospital almost never made the journey across the Domain. The matron arranged the admissions and discharges, the operating lists and nursing rosters. The interns were invited to morning and afternoon tea each day and over cucumber sandwiches kept informed of their batting average. The matron was also adept at keeping ambulatory patients in hospital for long periods, if they had no objection and were prepared to help with the chores!

At the end of Eddie's intern year he was offered a Senior Resident post at Sydney Hospital, but he had enlisted in the army with most of his colleagues, and wanted to experience overseas service. However, as civilian medical services were running down, a Medical Co-ordination Committee directed him to continue at Sydney Hospital for 1944. During this year, as part of his duties in one term, he was assigned to supervise the Eye Department. Eddie wrote some instructions for incoming interns, which caused much excitement, as he was the first person who had ever taken any interest in this area.

Towards the end of 1944 Sydney Hospital was granted funding for a Registrar (third year) position at the Eye Department, which was offered to Eddie. He declined the offer as at that time he wanted to specialise in general medicine. However the Medical Coordination Committee appointed him to the Eye Department anyway. In the event no-one in his year was posted overseas on active service.

Although initially Eddie thought he would be wasting his time, his interest in Ophthalmology rapidly increased. Due to the absence of staff overseas, the active staff were overworked and as Eddie gained experience he was encouraged to take more responsibility. He took charge of inpatient and surgical rosters, and during his 5 year tenure of the Registrar position he was exposed to a tremendous volume of surgical and medical experience. In the latter part of this period he did large surgical lists without supervision to help reduce waiting lists and his great surgical skills and fine judgement came to the fore. Eddie was undoubtedly one of the finest surgeons I have seen anywhere in the world. Even late in his career, battling with rheumatoid arthritis, his surgical dexterity was remarkable.

In 1945 the NSW Post-graduate Committee was set up, along the same lines as that in Victoria, with the involvement, for the first time of the University of Sydney in Post-Graduate education. Dr Victor Coppleson at the University and Dr Cedric Cohen at the Sydney Hospital Eye Department, were instrumental in this regard.

The first Diploma in Ophthalmology examination was held in 1947, in two parts, and six candidates were eventually successful, among them Drs E J Donaldson and W Deane-Butcher. Towards the end of 1949 two new appointments to the Honorary staff were made, and Eddie (with Bill Deane-Butcher) was appointed to the Honorary staff.

Eddie surveyed the results of retinal detachment surgery in Australia at that time and found that of those operated on, (and many were not) about 10% of retinas were re-attached. The general technique comprised trying to find the tear, often unsuccessfully, then treating at least 90° of the sclera with diathermy, draining fluid with the diathermy needle and hoping for the best. The results overseas were reported to be considerably better, especially in Europe. As each member of the Honorary staff treated only a few detachments, Eddie floated the idea of starting a retinal detachment clinic. This was eventually passed by the Honorary staff, with the proviso that the clinic had to be separate from the general outpatient clinics.

Thus in 1952, the first of the Special Clinics, and the first Retina Unit in Australia was born.

In 1958 Gerd Meyer-Schwickerath, with Zeiss in Germany, had developed a clinical Xenon arc photocoagulator, and Eddie enrolled for the second photocoagulation course in Essen in 1959. He went on from there to visit centres in Belgium, France, Spain, Switzerland, Germany, England and finally the United States. He spent 7 months overseas on that occasion and subsequently was to make several more study trips, mostly to centres in the US. Although Eddie was not as impressed with retinal surgery in the UK as in many centres in Europe and later in the USA, it was Lorimer Fison, who had visited Schepens in Boston who introduced him to the binocular indirect ophthalmoscope.

In 1960, as a result of Eddie's contact with Zeiss, the Eye Hospital acquired a Xenon arc photocoagulator. The instrument was large, heavy and hard to manouvre and with an articulated monocular direct ophthalmoscopic

delivery system, it was not easy to use. Its light source simulated sunlight, larger spots were painful except with retrobulbar anaesthesia and treating with the small spot size around the macula was hazardous. Eddie was undoubtedly the first to master the technique. Subsequently the Ruby and finally Argon lasers became available, and their use heralded the controlled trials which were the start of "Evidence based Medicine", at least in Ophthalmology.

Eddie had already been trying encircling procedures with the Arruga string technique and later with polyethylene tubing prior to his visit to Boston in 1959 and subsequently for a period he tried fascia lata as well as solid silicone, using the latter almost exclusively from about 1966. He was a great fan of Ed Norton, who founded the Bascom Palmer Eye Institute in Miami and he introduced fluorescein angiography after visiting Don Gass there in 1965. Harrell Pierce at Johns Hopkins and Chris Zweng at Palo Alto were also influential in his further development of the Retina Unit.

By 1962 the Retina Unit was very busy, seeing about 300 new patients in the year, and Eddie was able to secure funding to start a Retina Registrar position for a one year full time post. Mal Tester was the first such registrar in 1964. Since that time Retina Registrars and Fellows from all parts of Australia and many overseas countries, especially in the underdeveloped world have been trained at the Eye Hospital.

In 1970, on the retirement of Frank Claffey as Chairman of the Honorary Staff and from the position of part-time Director of Ophthalmology and Eye Health, Eddie took on the job of Director, and was instrumental in maintaining Ophthalmology as an undergraduate subject in the Medical Curriculum. He organised both student and Registrar training beside carrying out, what was of necessity very much a part-time private practice. He spent 7 years as Director, until the appointment of Frank Billson as Professor in 1977.

From 1979 till his retirement from the Eye Hospital staff in 1985, Eddie was chairman of the VMO staff, and still head of the Retina Unit. He was also instrumental in 1982, the centenary year of the Eye Hospital, in the formation of the Sydney Eye Hospital Foundation, the Principal Sponsor of this Conference.

Eddie however, was not content with contributing only via the Eye Hospital, and was also active in the Ophthalmological Society of NSW, the Ophthalmological Society of Australia and later the RACO (RANZCO), of which he was President in 1978-79. In 1985 he was honoured for service to Ophthalmology, particularly in the field of retinal diseases, being appointed an Officer of the Order of Australia. Subsequently, in 1987 he received the RACO Medal, the highest honour the College can bestow on a Fellow.

Above all however, Eddie was a warm and compassionate man and always generous with his time. I remember his being asked to help colleagues out of surgical difficulties and he would go off to a private hospital and assist with a redo of a retinal detachment, usually on a weekend, without complaint or criticism.

Eddie became the last opinion for most difficult diagnostic and surgical problems and there were few Ophthalmologists who would not have felt comfortable about seeking his advice. He had the rare ability of being able to point out how wide of the mark your view may have been and giving the correct diagnosis, yet allowing you to save face and maintaining the patient's confidence in you as the referring specialist. I was always grateful for the opportunity to have had such a long and harmonious association with him.

Eddie was one of the most gifted surgeons anywhere in the world, a first class teacher, and generous in transferring his skills and expertise in the training of future generations of ophthalmologists and Retinal Surgeons. He was also a great role model for young ophthalmologists, always putting the patient's best interests first, mindful of their non-ophthalmic needs and prepared to forego financial reward if necessary.

Eddie Donaldson was a quiet achiever, modest in the extreme and he never looked for public acclaim nor did he speak of his successes. He was a great one for chatting to anyone at the Eye Hospital, he had a warm sense of humour and often shared a joke with colleagues, nurses or the trolley-man in the theatres.

He also found time to spend with Marj and their four children, and they had many wonderful times at their Avoca Beach hideaway. Marj, whom he had met at Sydney Hospital, was always by his side, a great support and a true sounding board, without whose unstinting love he could not have achieved all he did. Marj was doing her nursing training when Eddie was a registrar

and I know she had a wonderful influence on Eddie from the outset, which was to continue for more than 50 years. She was always with him at social gatherings and conferences, and they shared many overseas trips with colleagues and friends over the years.

Their four children are all a credit to them and the many grandchildren a great joy. Eddie and Marj were of course happy that Craig chose to follow in Eddie's footsteps and is a highly trained Paediatric Ophthalmologist, and now one of our Alumni.

Eddie could hardly have anticipated, when starting the Retina Unit, the startling advances in vitreo-retinal surgery in the next 50 years, nor the transformation of his beloved specialty of Ophthalmology, since his retirement from the active staff of the Eye Hospital.

In 1952 Sulphonamides and Penicillin were still wonder drugs, the first tentative steps in intraocular implantation for cataracts were taking place and it was nearly twenty years before modern vitrectomy was introduced by Machemer and his co-workers. The concepts of retinotomies to drain subretinal fluid, retinectomy in detachments with PVR, submacular surgery for choroidal neovascularisation and the use of heavy liquids without buckling in giant retinal tear detachments were all to develop during Eddie's lifetime.

We as Alumni, who benefited from Eddie's many contributions to our hospital and to Ophthalmology in Australia, celebrate his many achievements and the Golden Jubilee of the Sydney Eye Hospital Retina Unit. If Eddie were still with us, although he might be sad at some of the developments in Medicine and Ophthalmology in particular which have occurred since he retired from active practice, he would be very proud that his Retina Unit is a world-class unit providing care for those in need and training others to continue the work in many parts of the world.

Alex B. L. Hunyor