

Correspondence

Quantitative trabeculectomy

SIR, I read with great interest the article¹ by Drs. Robert David and Uriel Sachs. I presented a similar paper before the All India Ophthalmological Society in January 1980. This paper which is to be published in the *Proceedings of the All India Ophthalmic Society*, is entitled 'Control of filtering bleb in trabeculectomy.'

My paper essentially reports a direct relationship between scleral flap thickness and resulting intraocular pressure. This conclusion was based on clinical studies concerning 3 groups of patients who had undergone trabeculectomy (54 eyes of 42 patients) with varying thicknesses of scleral flaps. In groups I and II the scleral flaps consisted of 2/3 and 1/2 thickness respectively, and in group III the scleral flap was 1/3 thickness.

There was evidence of subconjunctival drainage in 95% of the eyes. In 77% trabeculectomy alone achieved the desired levels of intraocular pressure and 20% of eyes needed additional pressure-lowering medication. One eye had to be reoperated on. In group III the bleb was more obvious, and postoperative intraocular pressure was between 9 and 13 mmHg. In groups I and II the blebs were less obvious and intraocular pressures were between 14 and 18 mmHg.

My study suggests that, by altering the thickness of scleral flap during the trabeculectomy operation, one can achieve the desired level of intraocular pressure in most cases. A thin scleral flap was advised in patients with extensive glaucomatous damage.

I would also like to point out that H. Saul Sugar should be recognised for his pioneering work in this area. He was the first to describe this subject in 1961.²

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References

- 1 David R, Sachs U. Quantitative trabeculectomy. *Br J Ophthalmol* 1981; **65**: 457-9.
- 2 Sugar HS. Experimental trabeculectomy in glaucoma. *Am J Ophthalmol* 1961; **51**: 523-7.

SIR, In their recent paper David and Sachs¹ suggest that adjusting the thickness of sclerocorneal tissue excised at trabeculectomy allows graded reduction in the intraocular pressure. They do not, however, offer any control operations for comparison, and they have overlooked recent evidence that a standard ungraduated trabeculectomy operation reduces the intraocular pressure to the physiological range irrespective of the preoperative pressure.² It therefore seems that the pressure control is not related to

the graduated dissection, and this proposed modification introduces a spurious and unnecessary complexity.

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References

- 1 David R, Sachs U. Quantitative trabeculectomy. *Br J Ophthalmol* 1981; **65**: 457-9.
- 2 Jay JL, Murray SB. Characteristics of reduction of intraocular pressure after trabeculectomy. *Br J Ophthalmol* 1980; **64**: 432-5.

SIR, Our paper, entitled 'Quantitative trabeculectomy,' deals with a surgical technique, while Jay and Murray's publication deals with intraocular pressure (IOP) reduction. There seems to be no major contradiction between our results, the question remaining whether the operating technique used on the 98 eyes in their series was identical. This is unlikely, as the procedure was performed by several members of the surgical staff, both juniors and seniors. As quantitative trabeculectomy is performed under high magnification, it is not unlikely that a certain amount of variation in the thickness of the sclerocorneal tissue removed did occur in their series too.

In 11 of our cases the preoperative IOP was more than 40 mmHg, and an average reduction in IOP at the 16-20 mmHg range as found by Jay and Murray should have been unsatisfactory. A higher reduction was obtained in these patients by removing 4/5th of the corneoscleral tissue thickness.

We disagree with the suggestion that 'control operations for comparison' should be performed. These would aim for improper reduction in the IOP, which of course is medically unjustifiable.

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Obituary

Air Marshal Sir Philip Clermont Livingston, KBE, CB, AFC, FRCS

Air Marshal Sir Philip Clermont Livingston, known to all his friends as P.C., died on 13 February 1982 at his home in Canada at the age of 88. He was an outstanding individual—not only because of his splendid physique but because he was endowed with a personality that was at once individual, attractive, kind, sympathetic, and above all enthusiastic.

Born in Vancouver on 2 March 1893 of British parents, he came to the UK on the death of his father and became an undergraduate at Jesus College, Cambridge, where in 1914 he gained a rowing blue. He rowed number 3 in the winning Cambridge University crew in March 1914. After passing his second MB he joined the RNVF, and from 1914 to 1917

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served as a surgeon-probationer on torpedo boat destroyers and armoured cruisers.

After qualifying at the London Hospital he elected in May 1919 to join the Medical Branch of the then embryonic Royal Air Force and proceeded, with foresight, to take the diploma of public health followed by qualifications in ophthalmic medicine and surgery and the FRCS of Edinburgh. He was later elected a Fellow of the Royal College of Surgeons of England.

In 1929 he was posted to Iraq as General Surgeon in the RAF, and while there he gained wide experience at the Royal Baghdad Eye Hospital, at the same time learning to fly and gaining his Wings. He then began to study the effect of sunglare on flying personnel in Iraq.

In 1934 he was appointed consultant in ophthalmology and he remained consultant until 1947. In 1937 he made a tour of medical establishments in Germany used for the selection of future German air force pilots. It was as a result of this visit that the then inferior flying equipment of the RAF was redesigned, and apparatus for evaluating the physiological needs of pilot and air crew was constructed. The 22-ft long low-pressure chamber, the human centrifuge, the depth perception and night vision apparatus, and the redesign of an RAF goggle are some examples of his drive and foresight.

He regularly attended the Congresses of the Ophthalmological Society of the United Kingdom and gave some interesting papers, including 'Heterophoria in aviation, its significance and treatment' in 1941 and 'Ocular disturbances associated with malnutrition' in 1948.

All this is admirably summed up in an appreciation which appeared in *The Aeroplane*:

'Livingston, who was a Specialist in Ophthalmology to the R.A.F. during the War, perhaps because of his personal experience of a pilot's needs, was better able than most specialists to appreciate the limitations of the consulting room. His deep knowledge of human nature, coupled with his ophthalmic skill and long acquaintance with aviation, allowed him in passing men for flying duties in the R.A.F. to offset optical infirmities by flying experience and courage. Many pilots, well below the accepted standards of vision, owe their successful flying careers to Sir Philip's perspicacity.'

He was appointed Deputy Director General of the Medical Services (RAF) in 1947 and was promoted to the post of Director General one year later. He held this appointment until he retired in 1951. His honours and awards included the OBE in 1938, the AFC in 1942, the CBE in 1946 and in the same year also the Medal of Merit (Czechoslovakia), the CB in 1948, and the KBE in 1950. He was honorary surgeon to the King from 1948 to 1950 and was a Commander of the Order of St John. He won the Chadwick Prize and Gold Medal for research and he gave the Montgomery, Moynihan, and Chadwick lectures in 1942-5. On retirement he returned to Vancouver Island, where he continued to practise ophthalmology and where he wrote an interesting autobiography entitled *Fringe of the Clouds* (1962).

He was married in 1920 to Lorna Muriel, only daughter of C. W. Legassick Crispin, of London. He is survived by his widow and one of his 2 sons.

T. KEITH LYLE

Dorothy R. Campbell, MA, MB, BS, FRCS, DOMS

The death of Mrs Dorothy R. Campbell on 12 March 1982 will be mourned by many ophthalmologists who regarded her as a colleague and friend. She was in her eightieth year.

Dorothy Rose Adams was born in St Albans, Herts, on 12 April 1902. She gained an entrance exhibition to Girton College, Cambridge, in 1920 and proceeded to first-class honours in the natural sciences tripos, acquiring several prizes on the way. These included a scientific and industrial research studentship for research on the crystalline lens for the Glassblowers Cataract Committee of the Royal Society. Her medical studies were continued at University College Hospital, London, from whence she graduated in 1926.



From 1927 to 1930 she was first a clinical assistant and then a house surgeon at the Central London Ophthalmic Hospital—more recognisable to many under its later name of the Institute of Ophthalmology, Judd Street. She married Dr George Campbell in 1931, and while he maintained a busy general practice in the area she became ophthalmic surgeon to the Hospital of St Cross, Rugby, in the same year. She was also

outpatient officer at the Birmingham and Midland Eye Hospital and in 1934 until 1940 was assistant surgeon there.

Mrs Campbell relinquished her post at Rugby in 1937 and joined the consultant staff of the Coventry and Warwickshire Hospital, remaining there until her retirement in 1962. From 1945 until 1965 she was director of the research department at the Birmingham and Midland Eye Hospital and was well known for her research into miner's nystagmus, migraine, and vitamin A metabolism in retinitis pigmentosa. She was a keen biochemist and maintained an interest in the metabolism of the retina until her last illness.

She was also an ardent supporter of women in medicine and the allied professions and had a close association with the orthoptists, starting the orthoptic school in Coventry and being a member of and an examiner for the British Orthoptic Board. She also examined in the diploma in ophthalmic medicine and surgery and was at various times vice-president of the Ophthalmological Society of the United Kingdom, president of the Midland Ophthalmological Society, and deputy master of the Oxford Ophthalmological Congress. In 1954 she was elected FRCS and in 1979 was made the first honorary member of the emeritus section of the International Association for Eye Research, of which she had been a founder member when, under the patronage of Sir John Parsons, it was known as the Eyeball Club.

Her enthusiasm for her work did not prevent Mrs Campbell from enjoying a close family life and an enthusiasm for sailing, which she shared with her husband,