

RANZCO Museum

Forging Links with India

At the invitation of the All India Ophthalmology Society (AIOS), I attended the national AIOS Congress in Delhi with 15,000 delegates! Following the Congress, several presentations were given by myself and Kirsten Campbell, Assistant Curator, on developing an online museum to project the work of the College and preserve its heritage. Fortunately, the Delhi air was clear and all travel was smooth, arriving home just before the COVID-19 crisis struck.

The AIOS Museum in Delhi, while small, has unusual artefacts on display including a carbon arc photocoagulator - pre-Xenon and an early vitrectomy device.

Travelling to Chennai, we lectured at the Elliot Museum situated in the Government Eye Hospital founded a year after Moorfields in 1819.

Elliot was an ophthalmologist in the Indian Medical service who, in 1913, developed the glaucoma operation by trephination. He was a polymath and superintendent of the hospital with interests ranging from magic to tropical medicine. He was an expert conjurer who became Chair of the Occult Committee of the Magic Circle on returning to London.

The long-term plan of the RANZCO Museum is to develop links with other ophthalmic museums in the USA and UK on the internet.



Carbon arc photocoagulator



Presentation of Aboriginal artwork to Prof Natarajan, AIOS President, from RANZCO



Government Eye Hospital Chennai (Madras)



Elliot trephines

70 Years Ago – Zeiss Xenon Photocoagulator

Meyer Schwickerath in Essen, Germany developed the Photocoagulator (PC) with Zeiss in 1950.

Preceded by the unreliable carbon arc machine, the Xenon PC produced an intense beam of light which focused on the retina. It was used to treat retinal tears, diabetic retinopathy and retinopathy of prematurity. An adaptor allowed treatment of surface lesions.

Dr Graeme Chester in Perth recalls using the machine in the 1970's at the Royal Perth Hospital. Termed 'Jumbo', whether affectionately or not, the large device delivered focused Xenon light

produced by electrical discharge in a high pressure Xenon chamber. The beam delivery was enabled through a long tube to a direct ophthalmoscope head which swiveled. The tube could be moved in a limited fashion to treat the recumbent patient on a trolley. Cumbersome to use, with considerable difficulty to locate and treat peripheral lesions, it produced large intense burns that enlarged over time. Proliferative diabetic retinopathy presented new challenges as any vitreous blood absorbed the light with heat being produced. Treatments preceded the

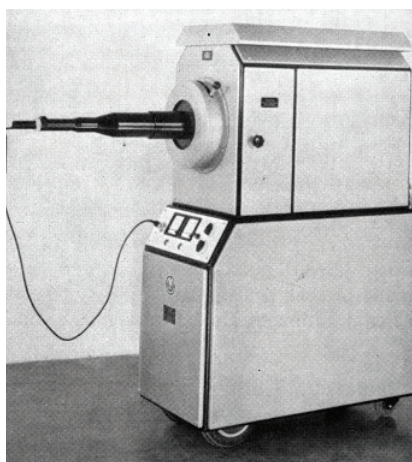
Diabetic Retinopathy Study, so initial protocols had not been established. Focal macular burns migrated in time, making results variable.

The burns were quite painful, limiting the treatments. Adjusting the patient's position to allow visualisation was limited by the adjustment of the delivery head.

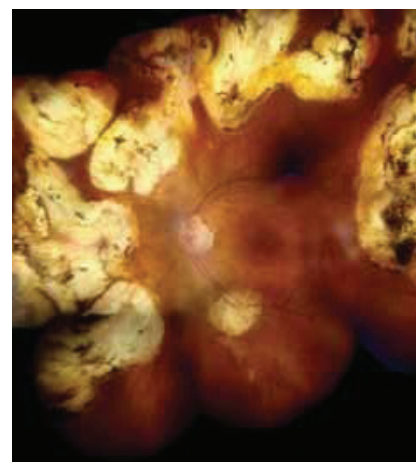
Treating infants with ROP required general anaesthesia with an assistant rotating the eye to visualise the periphery. Nevertheless, Graeme acknowledges patients with useful vision decades after being treated as infants.



Meyer Schwickerath



Zeiss Xenon Photocoagulator



Retinal burns produced by Xenon Photocoagulator

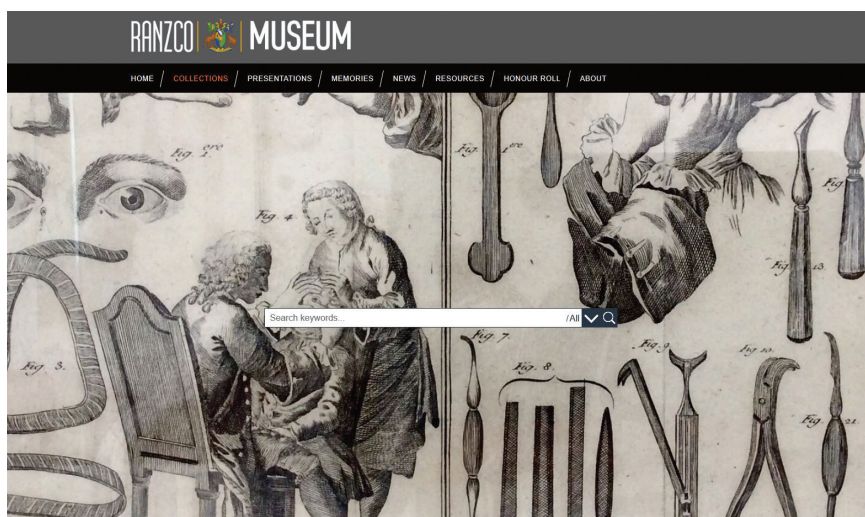
Major Upgrade for the RANZCO Museum Website – Collections Viewing

The installation of iMu software has allowed a much improved display and search function of the artefacts in the Museum. This is viewed via the Collection tab on the RANZCO Museum website (<https://museum.ranzco.edu>).

The unfortunate cancellation of the RANZCO Congress in October has allowed for a lot of work to be done on developing presentations covering the history of the photocoagulator and Elliot's trephination for glaucoma.

The presentations and posters from 2019's 50th Congress are now on the Museum website.

Dr David Kaufman
Curator, RANZCO Museum



New collections page from the RANZCO Museum website

