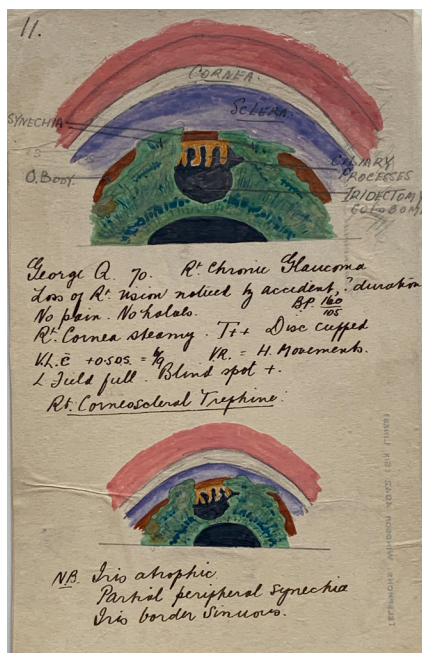


The Art of Gonioscopy



Watercolour painting

Visualisation and recording the structures of the drainage angle was first performed by Trantas in 1898. By a chance indentation of the sclera, he viewed the angle using tears as a prism. Separately, Maximillian Salzmann used a contact lens to view and draw the angle, recording many varied angle structures. His design was a contact lens utilising direct viewing.

The lens was modified by Koeppe in 1919 allowing a 360-degree view. Limited by poor lighting and size, Troncoso in 1925 designed a handheld microscope with inbuilt lighting, later publishing the first atlas dedicated to gonioscopy.

Hans Goldmann achieved better and more practical visualisation designing a gonio lens with an inbuilt mirror, familiar today.

Melbourne ophthalmologist Bill Box, using a Troncoso gonioscope, investigated a series of patients with glaucoma in 1935. The classification at that time was limited to simple and congestive

glaucoma. Often intraocular pressures were measured digitally with some ophthalmologists eschewing Schiottz indentation tonometry.

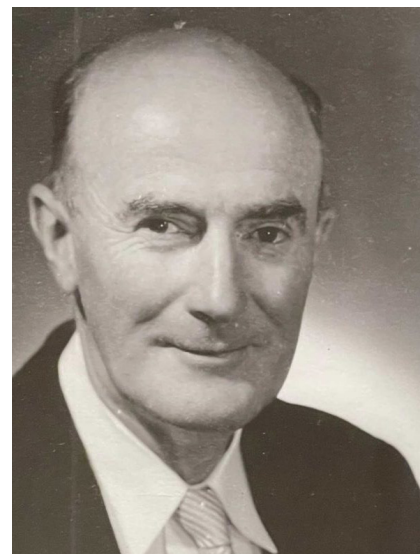
With meticulous precision, Box painted his findings in a series of 21 patients, recording detailed observations with Copperplate script.

Although his observations were beautifully recorded, Box was puzzled as to the significance of open and closed angles. He hypothesised that cases of simple glaucoma with angles open progressed late in the disease to angle closure.

Corneal transplantation has undergone radical changes in recent times. It is worth recalling the challenges that Tom (later Sir Thomas) Travers overcame when he performed many corneal transplants in the mid 1950's in Melbourne.

At that time, he used only loupes and handheld lighting for the procedure. The host cornea, often deformed from keratoconus, was trephined using a handheld Barraquer 5-5.5mm circular blade. The donor cornea stored in a moist pot for less than 24 hours was punched on a sterilised cork block. The graft was inserted over an air bubble and secured with an overlay of egg membrane from a freshly boiled egg! As sutures were limited to hand threaded Grieshaber needles loaded with 6/0 silk, two crossed horizontal mattress sutures over the egg membrane were inserted in the adjacent sclera. The patient was nursed flat with soft food and bowels confined for three weeks. Remarkably, many of the grafts survived despite steroids having not yet become available. The small size of the graft limited leakage and iris prolapse. I was fortunate to regraft two of these eyes where the periphery had further deformed.

Fast forward to today with cross linking and endothelial grafting as day surgery where good vision can be achieved in a few weeks.



Sir Thomas Travers.

Join us at the RANZCO AGM where Dr Ian McAllister will be acknowledged for his donation to the RANZCO Museum. The largest donation of its kind, the **Ian McAllister collection** features an enormous and diverse display of ophthalmology from Australia and around the world.

Get a sneak peek before the collection is catalogued by museum curator, Dr David Kaufman. The collection will then be displayed publicly on the RANZCO Museum website.

A private collection of this size is very rare and RANZCO is very fortunate to benefit from Prof McAllister's generosity.

The RANZCO AGM will take place on Sunday 30 October at 8am to 8:45am, Great Hall 2.

David Kaufman
Curator, RANZCO Eye Museum