

5th International Conference on

Clinical & Experimental Ophthalmology

August 04-06, 2015 Valencia, Spain

Lymphatics of the anterior segment

Daljit Singh

Daljit Eye Hospital, India

Background: In 1999, I injected lignocaine to limbus at 10 o'clock and accidentally saw a channel swell up at 2 o'clock and a lymphatic was observed. The search started using slit lamp microscope. High definition film/digital photography gave quality images that brought out the lymphatics in great detail.

Outpatients: Any sub-conjunctival haemorrhage enters lymphatics. Even transparent lymphatics are visible if one is aware. Pigment around limbus better defines lymphatics. Beautiful patterns were recorded. One megalocornea showed a central network of channels. Channels were also seen in arcussenilis. In one case channels covered whole cornea. One case had very sharp arcussenilis with prominent lucid interval. Sharp holes (representing corneal channels) in multiple layers opened in lucid interval. Optical section showed connections between lucid interval canal of Singh and corneal channels. OCT studies reconfirmed slit-lamp findings. OCT showed communication between Schlemm and Singh canals.

Operation Theatre Findings: Trypan blue dye injected at the limbus filled conjunctival lymphatics. Twisting limbal conjunctiva highlighted lymphatics. Blunt wire and fine cannula were introduced in lucid interval canal of Singh.

How Fluid Moves: From the anterior chamber through Schlemm and aqueducts to Singh canal from where it nourishes the cornea, a part is drained to the conjunctival lymphatics. Every point has been proved with photographs.

Suggestion: The lymphatics of the anterior segment act as flood drains after glaucoma surgery. The chances of success are increased if lymphatics are preserved.

Biography

Daljit Singh has completed his MBBS (1956), MS (1963), DSc (1992) from Punjab and GND University. He has 28 years experience in Medical College faculty in Pharmacology, Physiology and Ophthalmology. He was Professor Emeritus since 1986 and Director of Daljit Eye Hospital, Amritsar since 1985. He introduced first IOL in India (1976), Iris claw lens since 1979 (over 140,000 implants), over 3000 kerato-prosthesis, found 9 new genes of congenital cataract working with GND University. He was the first user of FugoPlasma Blade (1999) and developed 3 minute "Transclary filtration" and "Microtrack filtration" operations for glaucoma. He has written three ophthalmology specialty books and five literary books. He is involved in searching corneal and conjunctival lymphatics since 2000.

daljits1@gmail.com

Notes: