

Telemedicine for Glaucoma Patients in COVID-19 Era

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In that Era with crowded hospitals and the need for social distance, telemedicine emerges as a solution for many problems. In ophthalmology Telemedicine has been started many years ago with limits. Now we have to widen the scope and applications of telemedicine (1-3)

Glaucoma patients needs a special follow-up regimen with intraocular pressure (IOP) measurement, fundus examination, and visual acuity (V/A) assessment. Regular visits to the hospital are required; however, in the telemedicine protocol, we can decrease their visits to the hospitals. (4-6)

Excluding emergencies, patients with glaucoma can follow the following protocol:

History taking: by phone or video call with health provider (3)

Visual acuity assessment: Patients can use Amsler's grid chart or smart applications for visual acuity and color vision.

Iop: I CARE tonometer can be a valuable tool; however, it is expensive. (7)

Visual field: There are Apps and devices to monitor the central 10, degrees including the commercially available preferential hyperacuity perimeter ForSee® device (Notal Vision) and discrimination apps such as mVT® (Vital Art and Science) application(8,9). Smart phone retinal imaging is available, but not yet designed for patients to use at home. (10-13)

Video call: with the health care provider to discuss the condition and guide the patient to either the hospital or drug prescription.

Future prospective: We aim at provide an optical coherence tomography (OCT) smart phone like apparatus. Intraocular devices for continuous IOP measurement are required.

Obstacles: Economic problems with some patients

Low-quality infrastructure in some places.

Benefits:

Decrease in hospital crowding

Social distance in the era of the COVID-19.

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