

Canadian Glaucoma Society Recommendations for Providing Eye Care to Glaucoma Patients During COVID-19 Pandemic

April 16, 2020

The COVID-19 Pandemic has led to widespread implementation of physical isolating measures and cessation of non-urgent medical visits and procedures. This document is to provide guidance to physicians caring for glaucoma patients to help mitigate the risk to patient and care provider while balancing the need for treatment to preserve vision. As this is a rapidly evolving health care crisis, these recommendations may be modified, and we urge all clinicians to use their own best judgement to individually manage patient care with best practices in mind. These recommendations are based upon and supplemental to the March 20, 2020 COS and ACUPO Guidelines for Ophthalmic Care during COVID-19 Pandemic and guidelines from American Academy of Ophthalmology, and the United Kingdom National Health Society guidelines.

Defining urgent and emergent glaucoma where an in-office visit should be considered

1. Emergent – patients at imminent risk of acute vision loss
 - a. Acute angle closure glaucoma
 - b. Glaucoma with IOP greater than 38 mmHg
 - c. Blebitis or bleb-related endophthalmitis
 - d. Device exposure
 - e. Bleb leak
 - f. Hypotony with high risk of vision loss
2. Urgent – patients at high risk of subacute vision loss
 - a. Uncontrolled IOP, relative to the stage of disease
 - b. Recent glaucoma surgery (≤ 3 months)
 - c. Monocular patients at high risk of subacute vision loss
 - d. Patients with symptomatic vision loss

Office Visits Considerations (For general recommendations regarding any ophthalmic examination please refer to March 20, 2020 COS and ACUPO Guidelines for Ophthalmic Care during COVID-19 Pandemic)

1. Patient visits to the office should be limited where possible to patients with emergent or urgent concerns as described above.
2. Non-urgent patients and prescription refills should be offered a virtual or tele-health check
 - a. Prescription refills should be faxed to pharmacies to avoid a patient visit
 - b. Telephone or virtual consults should consider assessing:
 - i. Medication tolerance and side effects
 1. Medication switches for side effect, or due to lack of availability of the original prescription, can be done virtually and follow-up can be

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increased to 4-8 weeks following the switch if the patient is tolerating the new medication

- ii. Visual acuity and visual field stability
 1. New or worsening central acuity
 2. New or worsening visual field defects detected by the patient
- iii. Triage need for in-person assessment

Tonometers and other Diagnostic Equipment

1. Where possible diagnostic tests should be limited
 - a. All staff performing diagnostic testing must be provided with appropriate personal protective equipment
 - b. Diagnostic equipment should be disinfected between patients
 - i. Tonometers and diagnostic contact lenses should be cleaned with 3% hydrogen peroxide or diluted bleach both followed with a thorough water rinse and air dry, or 70% alcohol wipes and allowed to air dry.
 - c. Tonometry is an important diagnostic tool for new and follow-up glaucoma assessments and should still be performed
 - i. Single-use disposable tonometer tips should be used when available
 - ii. Alternate methods of handheld tonometry such as tonopen or iCare tonometers with disposable tips that allow for greater spacing between face of patient and examiner may be considered
 - iii. Air puff tonometry is not recommended due to greater risk of aerosolizing the tear film
 - d. Gonioscopy should be limited to cases where there is concern for acute or chronic angle closure
 - e. Visual field testing should be reserved for cases where the physician deems this absolutely necessary, such as in advanced glaucoma patients with possible progression of fixation-threatening field defects. Effort should be made to optimize ventilation in rooms where visual fields are being performed
 - f. Imaging should be deferred except where the physician has deemed absolutely necessary
 - i. Anterior segment imaging may be considered as an alternative to slit lamp gonioscopy where clinically appropriate to reduce exposure time between patient and examiner and contact lens examination is not absolutely necessary

Surgical Considerations

- a. Elective and non-urgent cases should be postponed

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- b. Urgent and emergent cases should still be performed to prevent acute or subacute vision loss. Emergent and urgent cases include the following:
 - i. Intraocular pressure not controlled on maximal medication with risk of progressive vision loss or significant patient discomfort
 - ii. Rapidly progressive glaucoma
 - iii. Progressive glaucoma in monocular patients
 - iv. Hypotony with hypotonous maculopathy and/or significant choroidals
 - v. Patients with intractable pain due to elevated intraocular pressure, for example corneal edema
- c. Consider alternatives to surgery
 - i. Where appropriate the use of laser (SLT, CPC, MP-CPC) may be considered if these procedures are more accessible or create less risk to patients or staff than surgery
 - 1. If used, laser lenses should be thoroughly disinfected between cases using 3% hydrogen peroxide, diluted bleach with a thorough water rinse, or 70% alcohol and allowed to air dry
 - ii. Prolonged use of methazolamide or acetazolamide may be considered as an alternative to surgery
 - 1. Patients using these medications for longer durations should be counseled to eat potassium rich foods and also have electrolytes evaluated as deemed necessary by their family physician

<https://www.cosprc.ca/resource/guidelines-for-ophthalmic-care/>
<https://www.aao.org/headline/new-recommendations-urgent-nonurgent-patient-care>
<https://www.aao.org/headline/list-of-urgent-emergent-ophthalmic-procedures>
<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>
<https://www.eugs.org/newsletter/newsletter-2020-04-covid19.asp>

The Canadian Glaucoma Society Recommendations for Providing Eye Care to Glaucoma Patients During COVID-19 Pandemic was endorsed by the Canadian Ophthalmological Society (COS) and the Association of Canadian University Professors of Ophthalmology (ACUPO) on April 16, 2020.