Intra-ocular pressure monitoring ‘drive in’ service

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Background

During the COVID-19 pandemic, routine outpatient clinic appointments were postponed due to the National lockdown and risks to patients of contracting the virus while attending their appointment. Alternative consultation techniques such as telephone and video consultations could not be adopted by the glaucoma team as clinical decisions are based on clinical findings including intra-ocular pressure (IOP), optic disc appearance and visual fields [1]. Optic disc appearance and visual fields often show changes over months to years. However IOP can vary in a shorter time frame. We also use IOP as a marker of response to treatment.

The IOP monitoring ‘drive in’ clinic was set up to allow us to monitor patients IOP. The clinic was carried out in the carpark in front of the Royal Eye Infirmary Plymouth, and their IOP was checked in their car by a Nurse Practitioner. The IOP was measured using an iCare (contact tonometry). This allowed us to reduce the risk of patients contracting coronavirus by reducing the need for the patient to enter the clinic building in person.

Their case would be analysed by glaucoma team member alongside their notes. A letter would then be written to the patient detailing the ongoing management.

Aims & Objective

1. To analyse the reason for referral into the ‘drive in’ IOP monitoring clinic
2. To assess the outcomes of patients attending the ‘drive in’ IOP monitoring clinic

Methodology

Retrospective analysis of patients attending the ‘drive in’ IOP monitoring clinic between July 2020 and December 2020.

Patients attending the IOP ‘drive in’ monitoring service were identified from clinic lists. Patients diagnosis, reason for referral to clinic and outcome of clinic appointment were recorded from the patient electronic notes (via medisoft).

The data was analysed using Excel

Results

· 172 patients were seen over a 6 month period in 194 appointments. 77% were attending due to a delayed face-to-face (F2F) appointment ; 23% recently had their treatment changed.

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Figure 1 shows that the majority of patients attending clinic had a diagnosis of glaucoma (39% POAG, 18% NTG) or ocular hypertension 24%.

Figure 1: Diagnosis of patients attending 'IOP drive through' clinic (n = 342)

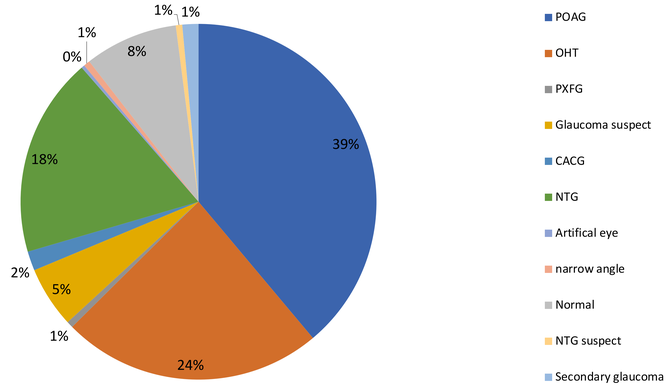
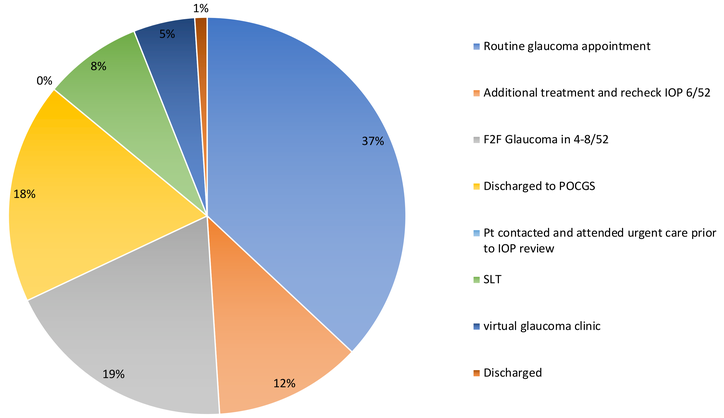


Figure 2 shows 18% were discharged into community care (Plymouth Optometrist Glaucoma Monitoring Scheme – POCGS). 20% of patient’s treatment were changed to further improve IOP control (additional topical drops or SLT laser). 19% were seen fairly urgently with face-to-face appointments within 2 months and 37% were seen routinely in glaucoma clinic (either face to face or in the virtual glaucoma clinic).

Figure 2: Outcome of attendance of 'IOP drive through' clinic (n = 194)



Conclusions

This clinic provided a more accurate way to stratify the risk of these patients who may not otherwise have been seen when face to face clinic appointments were limited due to COVID-19 restrictions.

It allowed us to change their management accordingly, thereby improving patient safety.

We hope we can continue to modify the use of this new clinic to meet the increasing demands of the glaucoma service. This could include IOP checks following a change in treatment or a recent laser procedure.

References

1 NICE guideline [NG81] Published: 01 November 2017: Glaucoma: diagnosis and management