



# Reducing diagnosis to treatment time for acute angle closure glaucoma

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## Background

- Acute angle closure glaucoma (AACG) is an ocular emergency that can lead to blindness if not treated quickly.
- Eye pressure is the only modifiable risk factor.
- The earlier the treatment to lower the eye pressure, the less damage occurs to the eye.

## Methodology

Change the current workflow:

Diagnosis of AACG made in clinic / A&E Eye room

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Patient/family/staff is given a prescription of a list of antiglaucoma eye drops & IV Diamox

Patient heads to pharmacy to buy the medications

Waiting for dispensary (average 25mins)

Head back to Eye doctor in clinic / A&E Eye room for eye drops & intravenous Diamox administration

•To the new workflow:

Diagnosis of AACG made in clinic / A&E Eye room

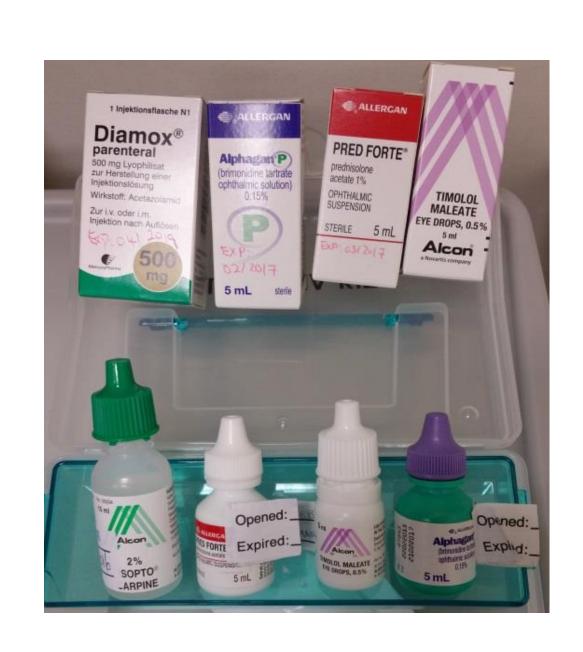
Eye drops & IV diamox administered as a stat dose

Patient gets quicker relief of symptoms, cornea clears up faster, optic nerve damage is stopped

Doctor can perform definitive treatment of laser Iridotomy

Acute glaucoma kit contains medications needed:





#### Results

- Reduced time taken from diagnosis of AACG to treatment.
- Time taken from diagnosis to administration of treatment was measured in 2 recent cases of angle closure glaucoma:

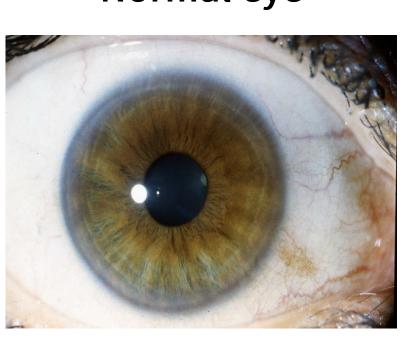
Diagnosis to treatment time

Without the kit: 25 minutes

With the kit: 12 minutes

- •Eye pain and pressure was controlled earlier, reducing the amount of irreversible damage to the eye.
- •Patients/family/staff did not need to travel to and from pharmacy while in pain and with blurred vision or a member of the clinic staff did not need to be taken away from clinic duties to the pharmacy to wait for a stat dose order.
- •Pharmacy did not need to rush an urgent stat medication order therefore reduced pharmacy workload.
- •Drops were shared between patients, reducing wastage.

Normal eye







#### Conclusion

- Benefits provided to:
- 1. Patient
- •Reduced diagnosis to treatment time
- •Alleviated patient's symptoms earlier
- Increased chances of visual recovery
- 2. Pharmacy
- Lowered workload for pharmacy department
- No need for STAT orders
- 3. Ophthalmology & Visual Sciences Department
- •Reduced time spent ordering and acquiring medication