

Mydriasis

What do you do locally?

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Background

A review of people who don't dilate with 20 minutes wait post 1% tropicamide and their outcomes with additional time and drops.

We wanted to review the effectiveness of giving people known to be poor dilators more time and drops to dilate.

Anecdotally the majority of DESPs give 15 minutes for mydriasis with 1% tropicamide. Some DESPs are giving 10 minutes for mydriasis, some DESPs are giving extra drops and an hour. Some have access to 2.5% phenylephrine and some don't. There is nationally quite a lot of variation and difference in mydriasis management.

Reasons for this are varied and include clinic schedules where the number of appointments means any additional time required for the giving of drops may impact on the screeners ability to manage the clinic successfully. The skill and experience of the screener can have an impact on the final outcome for the patient. The aim is to achieve the best possible mydriasis for the person giving the screener the best opportunity of good quality imaging and grading.

Bausch and Lom manufacturers of minims 1% tropicamide give no indication of peak effect of drops due to difference for each individual depending on factors such as colour of the iris and neuropathy caused by diabetes or post eye surgery.

But if we can't dilate the follow up is in a more costly slit lamp examination which also can put the person and DESP to further inconvenience. Could this be prevented by additional time and drops?

Method

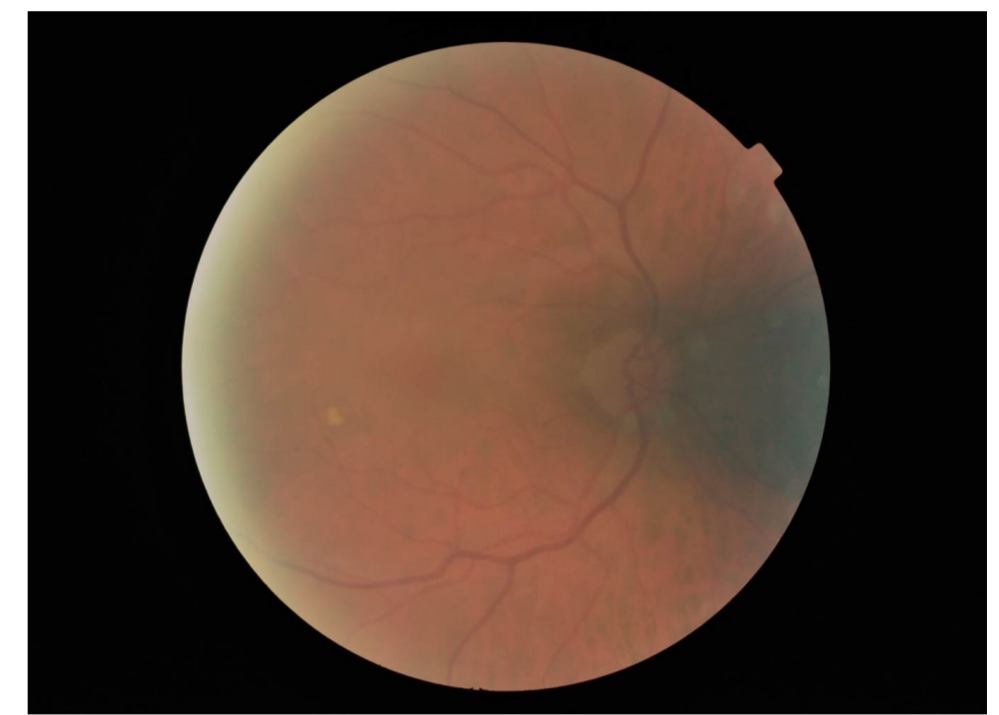
As part of an experiment we took 5 people coming up in clinic during one week, who are known as poor dilators and gave them the FULL works. They had 2.5% phenylephrine and 1% tropicamide, a wait of 30 minutes then another drop of 1% tropicamide then another 30 minutes. A total of one hour for mydriasis with 2 different mydriatic agents.

After one hour wait the results showed improved mydriasis in all 5 cases with 2 who were previously unassessable now being assessable, 3 were still unassessable due to cataracts impeding views despite achieving mydriasis. Skill and experience of the screener can also factor in with the end result.

Results

We have adapted our protocol to accommodate known poor dilators to give an hour post initial drop administration of 1% tropicamide and 2.5% phenylephrine to allow maximum effect of mydriasis. We will monitor the amount of slit lamp bookings in the coming year, the impact may be small but is estimated at a possible 96 appointments in slit lamp a year.

Here is a series of the photographs taken for one person



This was the images with one to two drops of 1% tropicamide a 20 minute wait



Now post 2 rounds of 1% tropicamide and a 40 minute wait



Now with 2.5% phenylephrine 1% tropicamide and an hours wait

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