

The use of a coloured wristband to prevent retained mydriasert in a paperless unit

A Gupta[1], S Dulku[1], R Chaudhary[1], A Manna[1]

[1.] University Hospitals Birmingham NHS Trust



Introduction

- Mydriasert is an ophthalmic insert used for pre-operative mydriasis placed in the inferior fornix (figure 1).
- It contains 0.28mg tropicamide and 5.4mg phenylephrine hydrochloride.
- Studies have demonstrated it to provide superior dilation[1], as well as requiring less nursing time[2], than standard drop therapy.
- However, as mydriasert is a foreign body, safety measures must be in place to prevent untoward retention.
- There have been a significant number of reports to the National Reporting and Learning System (NRLS) relating to retained mydriasert, prompting the Royal College of Ophthalmologists to release a safety alert in November 2022 (figure 2).
- We describe a case of retained mydriasert in our unit and the subsequent safety measures implemented to prevent recurrence.

Figure 1



Case

- A patient (Mr A) attended for cataract surgery and a mydriasert was inserted pre-operatively.
- Unfortunately, the procedure was cancelled for medical reasons and the patient was discharged before the mydriasert was removed.
- No harm occurred, as the mydriasert later fell out of its own accord and Mr A was asymptomatic throughout the entire period
- However, a serious incident investigation took place to guide additional safety procedures to prevent recurrence.

Figure 2



Figure 3

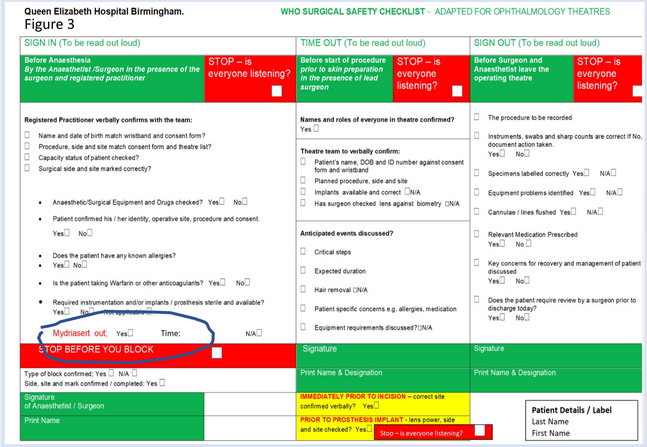


Figure 4



References

1. Comparative study measuring the dilatory effect of a mydriatic device (Mydriasert) vs topical drops. Saenz de Viteri M et al. Int J Ophthalmol. 2013; 6(6): 801–804
2. Mydriasert pupillary dilation for cataract surgery: an economic and clinical study. Shah A et al. BMC Ophthalmol. 2015 Jun 3;15:56

Result

- Prior to this incident, standard practice for the use of mydriasert was paper based documentation of insertion. However, as our trust has become increasingly paperless with electronic prescribing and admission, the paper based documentation has become frequently overlooked.
- Previous practice for removal included a check on the WHO surgical checklist (figure 3), to remind clinicians to remove the mydriasert prior to anaesthesia.
- However, as this patient did not have the surgery, the WHO checklist was not performed, as this is performed only once the patient enters the anaesthetic room or theatre.

- Other units have introduced a stamp marked on the patient records to highlight mydriasert insertion. However, as our unit is a predominantly paperless unit, a stamp is not appropriate.
- As a result of this case, we introduced a green wristband (figure 4), which is applied to the patient when a mydriasert is inserted and removed when the mydriasert is removed.
- This wristband is a clear visual reminder that a mydriasert is in situ and no cases of retained mydriasert have occurred since its introduction.
- Other changes to be introduced after this incident include a discharge checklist, for patients whose procedure has been cancelled, to include mydriasert removal.

Conclusion

The use of a stamp on paper notes to prevent mydriasert retention will not be possible as more units become paperless. We demonstrate that a coloured wristband is an alternative effective safety measure to prevent occurrence of this serious incident.