

Reducing Omission of Eye Drops During Hospital Admission: A Quality Improvement Study

Charlotte Ho¹, Darren Ting², Devina Gogi¹

¹Department of Ophthalmology, Calderdale Royal Hospital, Halifax ²Department of Ophthalmology, Queen's Medical Centre, Nottingham

BACKGROUND AND AIMS

- There is ongoing evidence to suggest that topical ophthalmic therapy is inappropriately omitted when patients with long-term eye conditions are admitted to non-ophthalmic wards
- The primary aim of this audit was to investigate the trust adherence to the National Institute for Health and Care Excellence (NICE) guideline on the prescribing standard of eye drops during hospital admission
- The secondary aim was to raise awareness and ensure successful compliance to the national standards to reduce unintentional eye drop omission on admission and subsequent complications

METHODOLOGY

- Electronic medical records of all medical and surgical adult inpatients were studied prospectively on two different occasions
- Quality of documentation on eye drops in clerking notes, the length of time taken between the admission and prescription of eye drops, and the accuracy of the prescription were examined
- Following the initial audit, interventions focusing on clinician education were implemented
- The same data collection method was used in the re-audit
- Chi-square (χ^2) test was performed to compare the significance of improvement

RESULTS

- A total of 64 and 58 patients with repeat eye drop prescriptions were identified in the initial audit and re-audit respectively
- Following the intervention, documentation of ocular diagnoses and eye drops on clerking notes demonstrated significant improvement from 41% to 59% ($p=0.046$)
- Eye drop reconciliation within 24 hours of admission also improved significantly from 45% to 69% ($p=0.008$)
- All patients (100%) received the correct eye drop prescription before and after the intervention

Comparison of the documentation and prescribing standards for eye disease / treatment on clerking notes before and after the intervention using χ^2 test.			
Outcome	Before intervention	After intervention	p-value
Ocular diagnosis and medication documented on clerking notes	40.6% (26/64)	58.6% (34/58)	0.046
Ocular diagnosis and medication not documented on clerking notes	59.4% (38/64)	41.4% (24/58)	
Eye drops reconciled within 24 hours of admission	45.3% (29/64)	69.0% (40/58)	0.008
Eye drops not reconciled within 24 hours of admission	54.7% (35/64)	31.0% (18/58)	

DISCUSSION

- There was a statistically significant improvement in clerking documentation of ocular diagnoses and timely prescribing of eye drops during admission after the education of clinicians
- Potential factors contributing to poor eye drop reconciliation on admissions include poor awareness of the importance of eye drops in clinicians, not being aware of patient's ocular diagnosis, and overlooking less frequently used routes of medication administration, such as eye drops
- Communication between different departments, involving medical staff and pharmacists, as well as national adherence to NICE and National Prescribing Centre guidelines, during medication reconciliation, can prevent unintentional omission of eye drops
- With the use of computer-based prescribing system, ophthalmic prescription errors due to illegible handwriting and lack of information can be minimised

CONCLUSION

By incorporating eye drops related topics in departmental introductory talk and mandatory teaching sessions, it is hoped that the incidence of inappropriate eye drop omission can continue to diminish nationally

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