

Should we be carrying out eye screening for those patients on the Ward if overdue their appointment?



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Introduction

Diabetic Eye Screening is offered annually to all patients with a diagnosis of T1 or T2 diabetes as retinopathy detected in the early stages, can be treated effectively thus saving sight. Many patients who do not attend regularly are at high risk of developing severe diabetic eye disease which can progress until it becomes symptomatic with vitreous haemorrhage and tractional detachment. At this point, treatment is often less effective and can result in blindness. Admission to hospital or poor health can be a reason for non-attendance at eye screening.

Inpatients with diabetes have been shown to have a higher prevalence of diabetic retinopathy (44%)¹ compared to the outpatient population (28.3% in type 2 Diabetes²) as their admission may be as a result of other diabetes complications if they struggle to control their condition or comply with treatment. As eye screening is offered as an outpatient visit within the same hospital, there is the opportunity to offer eye screening to patients during their admission. Health care professionals involved in their inpatient care are also able to speak to patients about the risks and encourage and support their attendance at eye screening.

Purpose

To perform a snapshot evaluation of all inpatients with diabetes at a central London teaching hospital. We prioritised those who are overdue their diabetic eye screening within South East London DESP to assess whether it is a useful exercise and whether they can be screened whilst an inpatient.

Methods

The patient cohort was identified from those already registered within SEL-DESP. The Optimize database was cross-referenced with the "Diabetes InPatient Census" which the hospital informatics team run daily. This utilised inpatient coding records to identify those patients who were overdue for their diabetic eye screening. We also liaised with the specialist diabetes inpatient team, the diabetes department and ward staff over the 3 days of the evaluation to determine which patients would be suitable for screening whilst admitted. Patients were transferred down to the eye screening room or eye clinic if mobile enough or an outpatient appointment booked for those close to their discharge. We also tried to identify patients that may be suitable for exclusion. Data were collected on gender, age, last recorded grading, suitability for screening, current grading and likelihood for exclusion.

Results

Fifty-four patients on the wards (including 4 out of area patients) (48% female) were identified as having diabetes (50 type 2; 3 type 1; 1 unknown) over the 3 day period of this evaluation. Their eye screening records were reviewed and those with the worse levels of retinopathy at their last screen were prioritised. Four patients were serial non-attenders. The average age was 70.

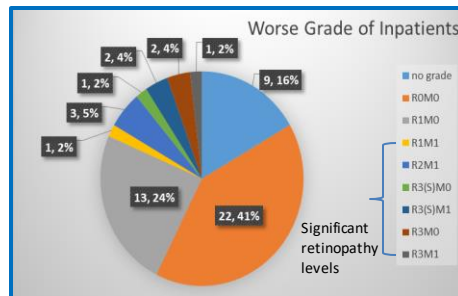
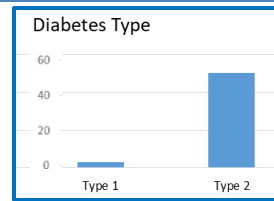
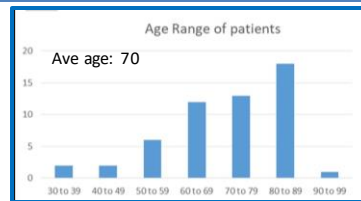
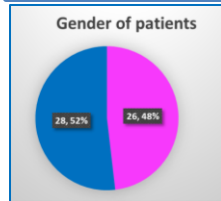
The evaluation was more of a challenge than envisaged. Despite the assistance of nursing and ward staff, the patients are inpatients for a reason! Several patients were not able to be mobilised/ screened due to recent amputations, MRSA infections, barrier nursing, frailty or being bed bound etc.. Six patients were sent to either the screening clinic or the HES clinic and 2 patients were reviewed on the ward (including 1 serial non attender) using indirect ophthalmoscopy but only a moderate view of the fundus was possible.

Level of retinopathy

10 patients (18.5%) had significant levels of retinopathy (see figure below); 3 with active R3. All these patients had been appropriately referred to the ophthalmology clinic during their admission. Any retinopathy was present in 23/54 (43%). No grade was determined in 9 patients.

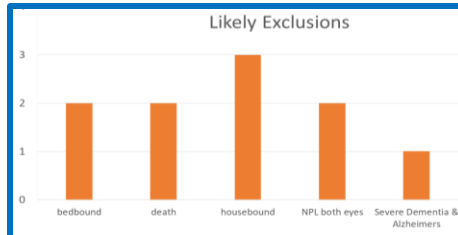
Suitable for exclusion

Ten out of 54 (18.5%) were deemed suitable for exclusion. 2 patients died during admission, 5 were long term bedbound or housebound and 2 patients had severe visual loss in both eyes (1 long standing and 1 due to haemorrhages caused by extreme gastroparesis and vomiting- already under HES) and 1 had severe Dementia and Alzheimers.



Conclusions

- The level of retinopathy amongst our inpatient cohort (43%) is in line with other studies¹ and is significantly more than in the outpatient population (28.3% in T2DM).
- All the patients with significant retinopathy levels had already been referred to HES services due to the ongoing communication between teams and were undergoing appropriate treatment.
- Many patients could not be mobilised to attend the clinic due to infection risk and poor mobility and screening patients on the ward itself was not that useful as there was a limited view with indirect ophthalmoscopy and limited treatment available.
- Liaison with diabetic specialist nurses and diabetic teams is essential to identify those high risk patients that can be screened effectively just prior to discharge.



Recommendations: This evaluation emphasised the importance of communication between teams within a hospital setting as a way of finding at risk patients and allowing appropriate referral. This also highlighted a useful way of identifying possible exclusions from the DESP programme. We therefore recommend regular cross-referencing of in-patient lists with those overdue DESP screening and liaison with diabetes hospital staff to allow screening just before discharge when patients are more mobile.