Improving the Management of Corneal Foreign Bodies within Gloucester Royal Emergency Department

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PROBLEM:

Corneal foreign body is the commonest eye presentation to the Gloucester Emergency Department but despite this, there is great variation in how this presentation is managed.

ASSESSING THE BASELINE:

Measuring against gold-standard criteria, current practice showed large heterogeneity of how professionals treated this condition across grades within the department. Data collection showed that only 12% of patients were receiving "perfect" management according to criteria in November 2015. Due to this we sent out a survey to identify the root cause of this spread.

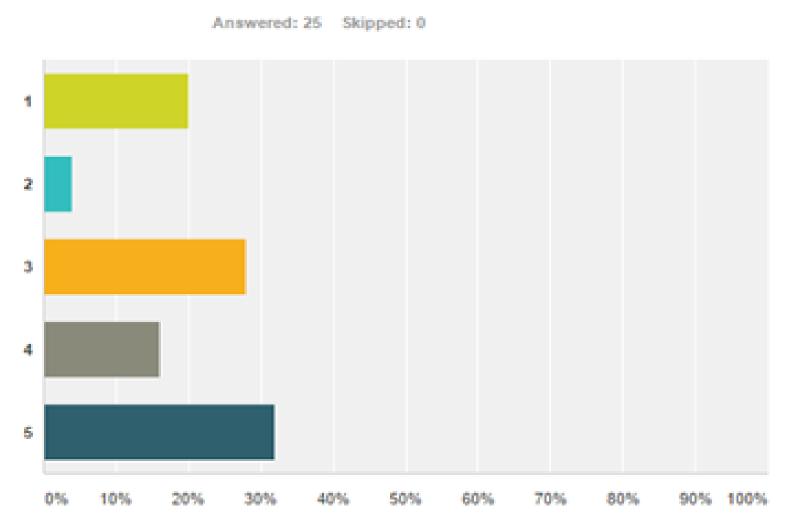
BEST PRACTICE:

Guidance taken from world renowned Moorfields hospital, we ascertained there are four key points to managing the corneal foreign body:

- 1. Use of Fluorescein
- 2. Eversion of the eyelid
- 3. Provision of antibiotics
- 4. Use of a slit lamp

ANALYSIS - Pre-Intervention Survey

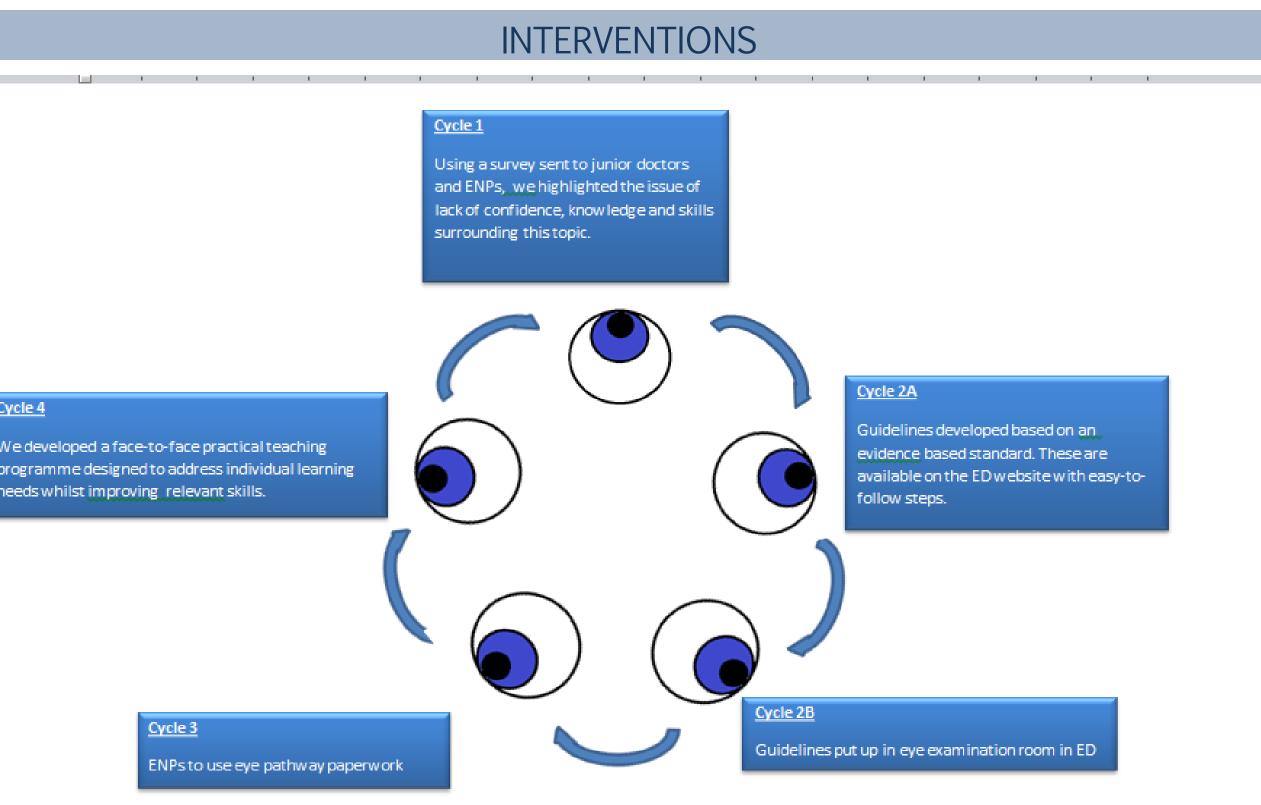
How confident do you feel at managing corneal foreign body in the eye? 1 = not at all confident, 5 = very confident



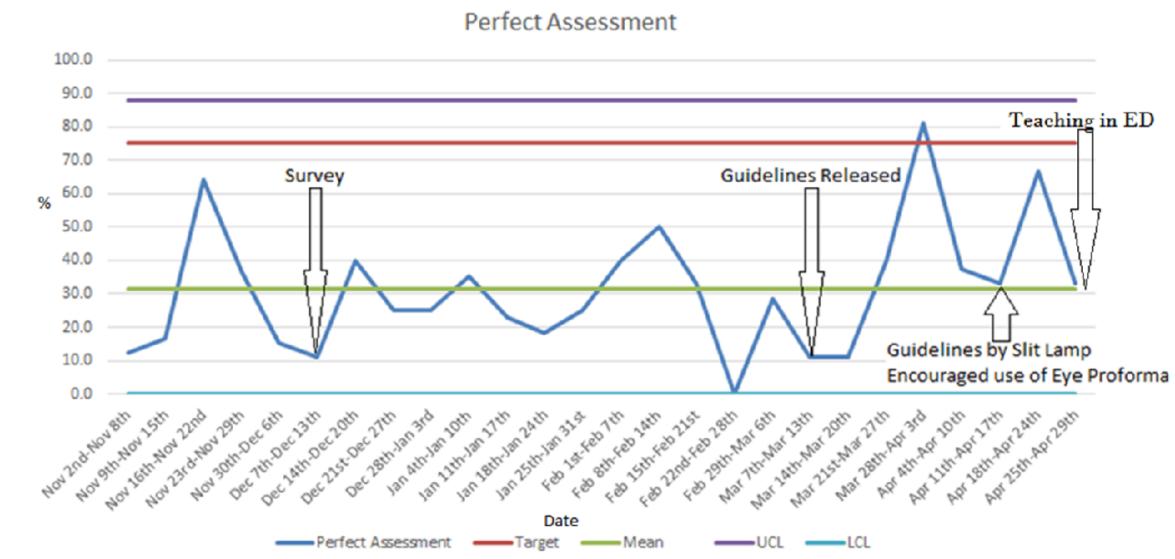
Cycle 4

RESULTS:





- Initial data collection showed spikes of improvement with each intervention, which rapidly tailed off. Despite the short effects of each change, the baseline did slightly improve.
- The guidelines have shown the greatest single improvement, as professionals are able to supplement any knowledge they lack.
- Initial data from teaching has shown significant improvement, and in light of this, we have engaged an ENP to continue teaching so this improvement can be maintained.





IMPORTANT LEARNING POINTS:

- Thorough assessment and appropriate management of corneal foreign bodies is vital in the prevention of complications which can be sight damaging.
- With appropriate education and guidance, all areas of gold standard treatment can be achieved.
- Confidence and knowledge are the two greatest limits to effective care.
- There is a need for ongoing reinforcement and education to maintain improvement.

THE FUTURE:

- Teaching session for ENPs
- Re-Survey Emergency Department staff
- Leaflets produced in conjunction with the **Ophthalmology Department**
- Ensuring a sustainable teaching programme led by ENPs for future trainees
- Involve Cheltenham Emergency Department
- Continue to re-audit each intervention