

Telephone Follow-Up for Cataract Surgery as a Response to the COVID-19 Pandemic

Rohini Yardi¹, Isma Rafiq¹, Tim Cochrane¹, Ebrahim Salah Elborgy² and Mohamed Elalfy^{1-3*}

¹Maidstone and Tunbridge Wells NHS Trust, Kent, UK

²Research Institute of Ophthalmology, Cairo, Egypt

³Queen Victoria Hospital NHS Foundation Trust, East Grinstead, UK

***Corresponding Author:** Mohamed Elalfy, Maidstone and Tunbridge Wells NHS Trust, Kent, UK and Research Institute of Ophthalmology, Cairo, Egypt and Queen Victoria Hospital NHS Foundation Trust, East Grinstead, UK.

Received: December 31, 2022; **Published:** January 04, 2023

Abstract

Introduction and Purpose: COVID-19 introduced pressures across the health service, including the need to minimise patient foot-fall in hospitals and local optometrists. Cataract surgery is the most commonly performed operation in the NHS, post-operative care representing a significant workload. Other hospitals have previously implemented telephone follow-ups and found it safe, effective and well received by patients. The RCOphth guidance on “Restarting and Redesigning cataract pathways in response to the COVID 19 pandemic” recommends considering telephone follow-up for uncomplicated cataract surgery, therefore it was trialled at Maidstone and Tunbridge Wells NHS Trust when surgery restarted after the first wave of the pandemic.

Setting: Telephone consultation for uncomplicated cataract surgery follow-up performed at Maidstone and Tunbridge Wells NHS Trust in Kent, UK.

Methods: This study included patients with no ocular co-morbidities who underwent uneventful cataract surgery. They were listed for telephone follow-up by the operating surgeon at the time of surgery. A telephone consultation follow-up was conducted by a one from a team of optometrists, nurses and a doctor. If the patient had any concerns which could be addressed or alleviated over the telephone the operating surgeon was informed and/or a face-to-face appointment arranged for the patient, as necessary.

Results: One hundred and thirty eyes of 125 patients were scheduled for telephone consultation follow-up over 113 days. One hundred and twenty six out of 130 episodes were successfully contacted for telephone follow-up. Those who did not answer were contacted on multiple occasions, booked for clinic follow-up, or received written communication of our attempts. Follow-up intervals ranged between 8 to 57 days post-operatively. Concerns were reported in (12/126) 9.5% of episodes, leading to 6 face-to-face assessment requests. Analysis demonstrated 50% of those referred for face-to-face review were not appropriate for this method of follow-up due to ocular co-morbidities.

Conclusion: Telephone consultation is a safe and effective method of follow-up after routine cataract surgery in patients without any ocular co-morbidities. It is important to ensure appropriate patient selection as those with co-morbidities are more likely to experience concerns and benefit from a face-to-face review. In addition, patients with hearing difficulties, language barriers, or cognitive difficulties are not appropriate candidates for telephone follow-up for cataract surgery as nuances in the post-operative recovery cannot be not clearly relayed.

Keywords: COVID-19 Pandemic; Telephone Follow-Up; Cataract Surgery

Introduction

The COVID-19 pandemic has forced all specialties to consider alternative pathways in the patient journey to minimise footfall in hospitals whilst continuing to deliver safe care; ophthalmology has been no exception. The processes developed out of necessity will also have a lasting impact as we are all too familiar with the growing pressures on the health service. As with many areas of healthcare the demand for outpatient appointments far exceeds supply. Developing patient pathways which safely reduce the number of outpatient appointments required will have significant knock-on effects by freeing-up resources thereby allowing delivery of other services.

Cataract surgery is the most commonly performed operation in the National Health Service (NHS) with 430,000 cases done in the year preceding April 2019 [1]. Before the coronavirus pandemic demand was already exceeding supply and with the suspension of surgical services during the pandemic 2020-2021 there will be many patients whose quality of life has, unfortunately, been adversely affected as a result. There will be a concerted effort to meet the needs of this population when services resume which in turn will increase the demand for outpatient appointments for post-operative review. This is an issue already acknowledged, and addressed, by the Royal College of Ophthalmology (RCOphth) in their guidance on "Restarting and Redesigning Cataract Pathways in Response to the COVID-19 Pandemic" [2]. The guidance states that those patients without high-risk ocular co-morbidities who underwent uncomplicated cataract surgery should not be followed-up in hospital clinics. These patients should, routinely, be seen by a local optometrist or receive a telephone follow-up at 2 - 4 weeks with a non-medical healthcare professional and be advised to see their optician for a sight test. Telephone follow-up has been evaluated once previously by Hoffman and Pelosini [3] highlighting good outcomes and patient satisfaction. RCOphth recognises that local optometrists are not commissioned for the post-operative pathway in all regions of the country and these services may take time to establish. Commissioning such services can take time and telephone appointment services may be quicker to set up in such cases.

Aim of the Study

The aim of this study was to examine the safety and efficacy of a telephone follow-up pathway for uncomplicated cataract surgery in patients with no ocular co-morbidities.

Methods

After the pandemic, the cataract surgery service at Maidstone and Tunbridge Wells NHS Trust was able to resume with some modifications to allow for the increased demand on the service. During the resumption of the service, the Trust trialled telephone follow-up for cataract surgery. Patients who underwent uneventful cataract surgery between at Maidstone Hospital were identified by the surgeon for consideration in this study. Patients were excluded if they had any ocular co-morbidities or complicated surgery. Those suitable for telephone follow-up were identified by the operating clinician on the day of surgery and the planned method of follow-up was logged accordingly on the operation note. The patients were informed about the appointment and given guidance on what to expect during the telephone appointment by the team prior to discharge.

A telephone consultation proforma was created and approved by the departmental governance team not only to record the outcomes but also to standardise the telephone follow-up service. These appointments were conducted by various members of the team including optometrists, senior nurses and a doctor. The proforma also allowed for any additional comments or concerns the patients wished to raise. Any concerns which were not addressed fully at the time of the consultation were escalated to the operating surgeon and/or face-to-face patient review was arranged.

All patients who were booked into the telephone follow-up clinic were included in the study. Patient notes for those who received telephone follow-up were reviewed to ensure this care was delivered safely and any patient concerns were addressed. All ophthalmology clinic diaries were cross-referenced to identify any attendances for potential late complications.

Telephone follow-up clinic appointment

The telephone appointments were conducted by a variety of multi-disciplinary team members including senior ophthalmic nurses, optometrists and a consultant ophthalmologist using an agreed upon questionnaire (Appendix A) which had been designed and approved

by the departmental governance team. The aim was to keep the questionnaire simple and in order to minimise ambiguity 'yes' or 'no' questions were posed with the option for patient to provide additional comments or raise concerns. The aim of the questionnaire was to highlight concerning features to clinicians (pain, redness, no improvement in visual acuity) and ensuring good post-operative care compliance (making sure patients were clear on their drop regime). If the patients had undergone cataract surgery on their first eye and were happy with the outcome the option to be placed on the waiting list for the second eye was also offered at the time of this telephone appointment. Based on the patient responses the appointment was categorised as: "Satisfactory"; "Needs review"; "Urgent review" with outcomes to "Email to consultant or secretary"; or "Contact Rapid Access" if the patient required review. If the outcome was satisfactory the patient was discharged at this stage with the advice to go for a sight test when they were 6 weeks post-surgery unless they were waiting to have their second eye cataract surgery.

The completed questionnaire was emailed to the responsible consultant, as this was a new service, as well as being uploaded onto the electronic record system in the trust for future reference.

A maximum of three attempts to contact a patient were made in each clinic session, before logging the outcome as 'Did Not Attend' (DNA).

All patients booked for telephone consultations were cross-referenced against all other ophthalmic clinic diaries, to ascertain how many went to attend another clinic including Rapid Access Eye Clinic (RAC) after their cataract surgery. The aim being to identify any missed or late complications thereby making sure the service was used efficiently (to reduce the number of appointments) and safely.

Analysis

Study data was collated in an anonymised fashion on an Excel Spreadsheet with simple percentage analysis.

Results

This study included 130 eyes from 125 patients who were booked for telephone follow-up after cataract surgery over a period of 113 days.

123 appointments were successful in contacting the patient in fewer than three phone-calls. For the remaining 7 appointments a further 3 were successfully contacted at a later stage and 4 could not be reached. 1 due to the incorrect contact details, a letter was sent to the patient to inform the Trust of their up-to-date contact details however this individual attended RAC in the interim where they were reassured. Another was rebooked into a consultant clinic as a separate telephone consultation and the last 2 patients continued to be unsuccessful contacts despite multiple attempts.

Figure 1 shows 126 telephone consultations were completed in an interval of 8 to 57 days post-surgery, the majority being around day 14-21. 97.6% (123/126) of patients reported improved vision and 99.2% (125/126) denied having a red or painful eye. The one patient experiencing pain had already contacted RAC and had been scheduled for a face-to-face appointment for the day after the telephone follow-up. At this appointment she was noted to have post-operative anterior segment inflammation.

100% were already comfortable with their drop regime or received further guidance on this at the time of their telephone appointment.

A total 9.5% (12/126) of patients raised concerns at the appointment. 6 were given advice and reassured as needed and the remaining 6 patients were referred for face-to-face appointments. 3 out of the 6 (50%) patients referred for face-to-face review had other ocular co-morbidities, therefore should never have been included for telephone follow-up. The clinic diaries were searched for any attendances

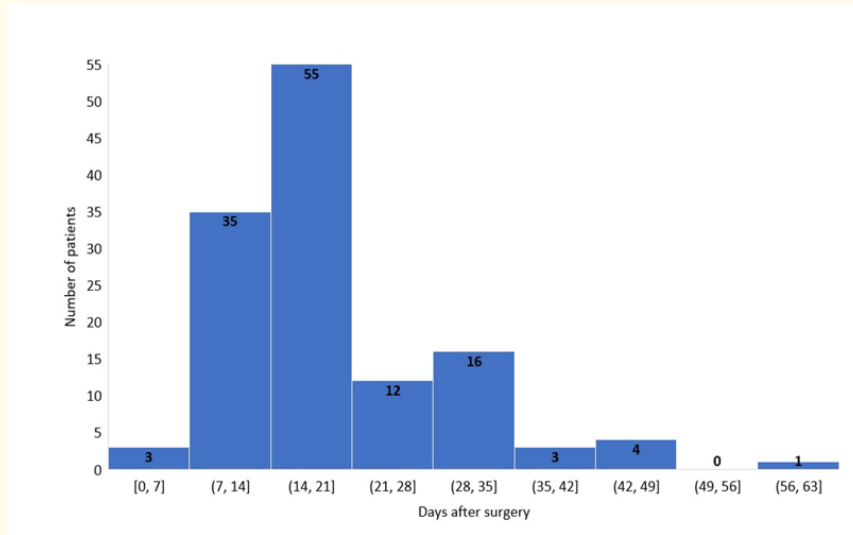


Figure 1: Graph illustrating interval between surgery and telephone follow-up appointment.

pertaining to all 130 episodes, including those identified during telephone appointments, which revealed a total of 12 patients returning for face-to-face appointments. These attendances were reviewed and the following issues identified:

- Post-operative inflammation x 1
- Post-operative cystoid macular oedema and glaucoma progression x 1
- Thyroid Eye Disease x 1
- Diabetic Retinopathy progression and raised IOP x 1
- New symptoms unrelated to the surgery x 1
- No abnormality and reassurance given x 3
- Routine appointments for other issues x 2
- Reviewed and reassured by operating clinician prior to telephone appointment date x 1
- Multiple appointments given (face-to-face and telephone) but patient did not attend x 1.

Whilst reviewing the telephone follow-up appointments it was noted that 8 patients had more than one telephone follow-up. This was likely due to a clerical error in the booking system while developing a new clinic protocol. Additionally, we were aware that operating surgeons selected telephone follow-up for more patients than the new service had capacity to accommodate. In such cases, the patients were booked for review with the community optometrist instead.

Discussion

The Royal College of Ophthalmology identified the role of telephone follow-up for cataract surgery when restarting services after lockdown however there is a paucity of data to demonstrate this is safe. This study clearly shows telephone follow-up can safely substitute face-to-face review for patients who undergo uncomplicated cataract surgery. The safety of telephone follow-up to replace the routine 2-week face-to-face review has only been assessed once previously by Hoffman and Pelosini [3]. This study demonstrated similarly posi-

tive results, on a smaller study population of 50 patients. Our study provides a larger data set and further evidence that with appropriate patient selection it is a viable service.

The aim of this new service is to free up capacity in hospital outpatient departments and community optometrists. In the pandemic, and for months to come, there will be the added benefit of reducing the number and duration of contacts the patient experiences, especially as the vast majority of patients who undergo cataract surgery are at high risk for a poor outcome if exposed to COVID-19.

The majority of patients reported improvement in vision and positive outcomes following cataract surgery. However, patient selection is vital; 3 of the 12 patients (25%) who attended face-to-face appointments after a telephone follow-up had ocular co-morbidities. The departmental policy was to exclude such patients from telephone follow-up; however, human error resulted in these patients being booked nonetheless.

One patient who had ocular co-morbidities also suffered from Dementia further making him a poor candidate for telephone follow-up. His carer had to conduct the telephone appointment on his behalf and infer his post-operative state from his behaviour. As a result, on reviewing the data, the department further added hearing impairment, language barriers and cognitive impairment (Dementia, Learning Difficulties etc) to the exclusion criteria for telephone follow-up. This highlights the importance of proper patient selection as a telephone appointment did not improve efficiency and, if anything, further prolonged the patient’s post-operative journey in these cases. It also highlights the importance of service evaluation when implementing a new system as issues identified with one patient demographic may not match those faced in other parts of the country or the world.

Conclusion

Telephone consultation is a safe and effective method of follow-up after routine cataract surgery in patients without any ocular co-morbidities. It is important to ensure appropriate patient selection as those with co-morbidities are more likely to experience concerns and benefit from a face-to-face review. In addition, patients with hearing difficulties, language barriers, or cognitive difficulties are not appropriate candidates for telephone follow-up for cataract surgery as nuances in the post-operative recovery cannot be not clearly relayed.

Appendix A

Telephone follow up questionnaire

Review - please ensure patient ID is checked on the phone			
Is your vision better?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Is your eye painful or red?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Do you understand what to do with your eye drops?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
If no , has this been explained to the patient?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Do you have any concerns about your eye?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
If this is your first eye do you want to be added to the waiting list for your second eye?	Yes	<input type="checkbox"/>	No <input type="checkbox"/>
Notes:			
Outcome – please only select one option			
Satisfactory <input type="checkbox"/>	Needs review	<input type="checkbox"/>	Urgent review <input type="checkbox"/>
	Has the Consultant or secretary been emailed	<input type="checkbox"/>	Has rapid access been contacted <input type="checkbox"/>

Bibliography

1. Buchan JC., *et al.* "The Royal College of Ophthalmologists' National Ophthalmology Database study of cataract surgery: Report 7, immediate sequential bilateral cataract surgery in the UK: Current practice and patient selection". *Eye* 34.10 (2020): 1866-1874.
2. The Royal College of Ophthalmologists. "Restarting and Redesigning Cataract Pathways in Response to the COVID-19 Pandemic". London. The Royal College of Ophthalmologists (2020).
3. Hoffman JJSL and Pelosini L. "Telephone follow-up for cataract surgery: feasibility and patient satisfaction study". *International Journal of Health Care Quality Assurance* 29.4 (2016): 407-416.

Volume 13 Issue 12 December 2022

©All rights reserved by Amr Mounir., *et al.*