

Virtual Follow-Ups after Cataract Surgery: A Systematic Review

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Introduction: Cataract surgery is routinely performed, and follow-ups are used to monitor complications. It is uncertain whether virtual follow-ups provide a safe and convenient alternative to in-person review. The purpose of this review was to examine the current literature on the association between virtual post-operative follow-up care and patient outcomes after cataract surgery.

Methodology: Medline, Embase and CINAHL were searched from inception to October 2023 for relevant articles containing original data. Studies that: 1) included patients that were seen in a virtual follow-up (i.e., telephone or video call) for postoperative appointments after cataract surgery, and 2) reported patient outcomes were included. Risk of bias was assessed using the Newcastle-Ottawa and ROB2 assessment tools. Descriptive statistics were used to summarize findings. The review was registered in PROSPERO (registration number, CRD42023477207).

Results: The search yielded 1710 records with seven studies included in this review. The seven studies reported on 2113 cataract surgeries in 1994 patients. The studies ranged between 2004 and 2020. Most of the studies (5/7) included only patients who had uncomplicated cataract surgery. Virtual follow-ups were all conducted by telephone. The follow-up calls were made at varying timepoints including postoperative day 1 (n= 3), postoperative day 7 (n=2) and postoperative day 14 (n=1). Two observational studies directly compared patients who had a telephone follow-up to a control group of patients who had an in-person follow-up. There were no significant differences in complication rates (p=0.22) or visual acuity (p=0.28) between these follow-up groups. None of the studies reported serious adverse outcomes from replacing in-person follow-ups with telephone follow-ups. One study used virtual follow-ups in conjunction with in-person visits for elderly patients, and having additional telephone follow-ups was associated with decreased surgical recovery time and decreased patient feelings of anxiety and worry. Three studies reported on patient perceptions about the use of telephone follow-ups. A common theme was that patients preferred telephone reviews and found them to be more convenient than in-person follow-ups.

Conclusion: For patients with uncomplicated cataract surgery, virtual follow-ups seem to be a safe alternative to in-person visits and were enjoyed by patients. These conclusions are preliminary given the limited literature base, and further study is needed.