Ophthalmology service recovery with 'General Anaesthesia to Local Anaesthesia Conversion' or GALA initiative: a new surgical service pilot

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Introduction

The suspension of all elective eye surgeries and non-urgent outpatient clinics due to COVID-19 pandemic had resulted in severe disruption to elective cataract service. This led to significantly prolonged waiting times for surgery and reduction in quality of life of our patient population.

Prior to COVID-19 pandemic, the waiting time for cataract surgery under general anaesthesia (GA) or local anaesthesia (LA) with intravenous sedation (IVS) at Sheffield Teaching Hospitals NHS Foundation Trust was 16 weeks. These have been prolonged to 36 weeks (range 30–52 weeks) due to the pandemic.

When sedation is required alongside LA, the patient must be monitored by an anaesthetist and is operated on a GA list. Before the pandemic, listing patients for GA surgery or LA+IVS was less restrictive due to the availability of GA lists. Based on observation alone, a significant proportion of patients who were initially listed for cataract surgery under GA or LA+IVS eventually tolerated just LA alone. This prompted an innovative solution; suitable patients who had been on the GA and LA+IVS waiting lists for a prolonged period were counselled for LA conversion.

We describe our quality improvement project whereby 'GA to LA conversion' or GALA initiative was established as part of our departmental strategy to tackle our GA and LA+IVS surgical backlog.



Method

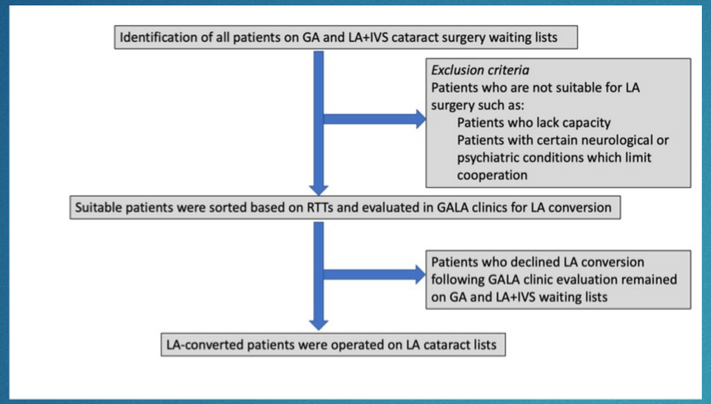


Figure 1. All patients on GA and LA+IVS waiting lists were identified from electronic records. Their medical histories were reviewed for LA conversion suitability. Patients who were clearly not suitable for LA were not included in this pilot. Suitable patients were prioritised based on their referral-to-treatment (RTT) times. Following this, patients were invited to monthly-run GALA clinic where they were assessed and counselled the patients for LA conversion. A personalised approach to the barriers of LA cataract surgery was offered. For example, a trial of lying on the operating table for those with severe breathlessness. LA-converted patients were then listed for the next available LA cataract surgery lists where they underwent routine cataract surgery. Patients who declined LA conversion following GALA assessment remained on GA and LA+IVS waiting lists.

Results

In this pilot scheme, 21 patients were seen in GALA clinics over a period of four months from August 2021 to November 2021. 71% of our cohort consented for LA surgery. Most of our patients had multiple ocular and systemic comorbidities which may pose as barriers to LA surgery (Table 1). Our cohort consisted of patients with variable surgical complexity (Table 2).

Overall, 14 eyes of 13 patients were successfully operated under LA alone (Subtenon's (n=5, 36%) and intra- cameral (n=9, 64%)). On the day of surgery, one case was abandoned as patient was unable to tolerate the surgical drape due to severe claustrophobia. In five cases (36%), the draping technique had to be modified to lift drapes off the patients' faces. In one case (7%), a family member escort had to be present in operating room.

Results (cont.)

Comorbidities	n
Ocular	
Glaucoma	3
Uveitis	2
Squint	1
Amblyopia	1
Ocular Hypertension	1
High Myopia	1
Diabetic Retinopathy	1
Cystoid macular oedema	1
Retinal Dystrophy	1
Cancer associated retinopathy	1
Optic neuropathy	1
Systemic	
Anxiety/panic attack/PTSD	8
Arthritis of neck and back	4
Claustrophobia	3
Asthma	3
Orthopnoea	2
Gastric reflux	2
COPD	2
Parkinsonism	1

Perioperative findings	n
Pre-operative	
Dense cataract	5
Shallow AC	3
Moderate dilation	3
Deep set eyes	3
Corneal opacity	1
Intraoperative	
Floopy iris	2
Weak zonule	1

Table 1 (on the left). Almost all of our patients had multiple systemic comorbidities that may impose barriers to successful conversion to local anaesthesia cataract surgery. COPD, Chronic obstructive pulmonary disease; PTSD, Post-traumatic stress disorder.

Table 2 (above). Perioperative findings of the cohort which indicates potentially more complex cases.

Nine cases (64%) were performed by consultant grade surgeons. The rest (36%) were performed by specialty and associate specialist (SAS) doctors (n=2) and specialty trainees (n=3). One patient (7%) had corneal oedema, which was successfully managed conservatively. Figure 2 highlights the positive subjective outcomes of this pilot.

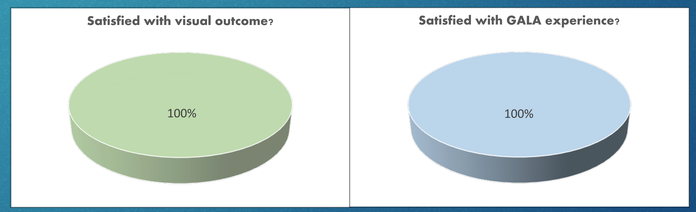


Figure 2. All patients in this series reported subjectively better vision following LA cataract surgery. More importantly, all of them were satisfied with their experience and would consider having their second eyes done in the same way.

Overall, this patient cohort's waiting time for cataract surgery was reduced by an average of 11 weeks. The average interval between GALA assessment clinic and LA surgery was only four weeks. As the GA cataract list is usually populated with four patients, the GALA initiative freed up three to four GA lists over the four months when the pilot study was run.

Discussion

The joint statement released by The Royal College of Ophthalmologists (RCOphth) and United Kingdom & Ireland Society of Cataract & Refractive Surgeons (UKISCRS) recommends that cataract surgery is performed under LA where possible as GA is an aerosol generating procedure.[1] Conversion to LA mitigates the risks of GA, intraoperative aerosol generation and risk of COVID-19-related morbidity and mortality, especially in high-risk population such as our patient cohort.[2]

By converting suitable patients from GA or LA+IVS to LA listing, GALA initiative reduced cataract surgery waiting time and increased the GA list capacity for cases that genuinely require GA and sedation. Patients with ocular comorbidities and significant perioperative findings were operated successfully under this pilot scheme. Good surgical planning was paramount.

Non-consultant grade doctors were not excluded from performing cataract surgery under this pilot scheme. This shows that conversion to LA surgery does not reduce training opportunities. Careful selection of converted cases for training must be done prior to the surgery to ensure trainees' competence in dealing with potentially more complex cases.

In the near future, this scheme will be expanded to include more surgeons and trainees. Following the recommendation of RCOphth and UKISCRS, patient prioritisation for the GALA initiative will be based on clinical requirements and patient factors rather than RTT alone.[3]

Conclusion

In conclusion, the GALA initiative has been shown to be a safe, effective and purposeful way to reduce the waiting time of cataract surgery and to increase GA list capacity. By navigating through this 'new normal era' together and through new sustainable initiatives such as GALA, we can speed up ophthalmology service recovery, increase capacity and efficiency.

REFERENCES

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