Evaluation of the cataract pathway and surgical outcomes in patients with advanced dementia and learning disability lacking capacity

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INTRODUCTION

The PrOVIDe study showed that 32.5% of dementia patients had binocular visual acuity worse than 6/12, and of those not correctable with glasses, 48% had unoperated cataracts (1). Public Health England (PHE) estimates that there were 930 400 adults with learning disability (LD) in England in 2015 (2). Rates of cataract in those with LD may be at least 24.4% from a Netherlands study (3). However, there is a paucity in the literature on cataract surgery outcomes and best practice in cataract surgery pathways for this cohort.

METHODS

The study was conducted at Moorfield's Eye Hospital and its operational sites across London, UK. All adult patients with an electronic "flag" for dementia or LD who had cataract surgery between 1st January 2021 and 31st May 2023 were identified. The patient electronic record was reviewed to exclude those who had capacity and collect patient information. We recorded patient demographics, clinic examination and discussions, consent and completion of a best-interests meeting (BIM), operative details, and intra- or post- operative complications.

PURPOSE

To analyse the cataract pathway, including pre- and post- operative clinic assessment, consenting, and anaesthetic choice, and describe surgical outcomes, in patients without capacity at our unit. We chose to focus on this group to capture the most challenging cases or dementia and LD and highlight areas requiring optimisation.

RESULTS

Patient characteristics	N=51, eyes = 67
Median age (IQR)	81 (70-86)
Female, n (%)	30 (59%)
Diagnosis, n (%): Dementia LD	 40 (78%) 11 (22%)

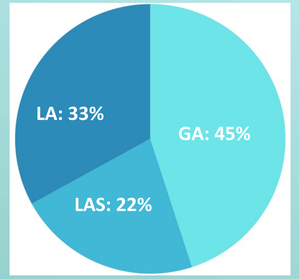
PRE-OPERATIVE CLINIC ASSESSMENT

Median BCVA: 1.00 LogMAR (0.48-1.81). 15 (22%) eyes were CF or worse. In 7 (10%) eyes VA assessment was not possible.
Median spherical equivalent (SE): 1.81 Dioptres (-0.38, +3.19)
Grade of cataract: 24 eyes (36%) had brunescent, white, or hypermature cataract.
History: There was no documentation of symptoms in 22 (33%) cases.

CONSENT

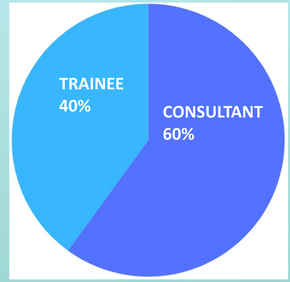
65 (98%) had a consent form 4: 57 (85%) done in clinic and 10 (15%) done on the day of surgery. A BIM was completed for 60 (91%) procedures.

INTRA-OPERATIVE ANAESTHESIA



GA, general anaesthesia; LA, local anaesthesia; LAS, local anaesthesia with sedation

GRADE OF SURGEON



COMPLICATIONS:

Intraoperative: none
Postoperative: 11 (16%) postoperative complications - 4 (6%) CMO, 6 (9%) rebound uveitis, and 1 (1%) increased IOP.

VISUAL OUTCOMES

SE: Post-operative refraction was done in 43 eyes. Median post-operative SE was +0.25 (0.00-0.75). 26/43 (60%) eyes had a refractive surprise of 0.5D and 12/43 (28%) eyes had a refractive surprise of 1D.
Visual acuity: There was a median improvement of -0.55 logmar (-1.23, -0.18) from pre-operative BCVA (p<0.001; Figure 1).

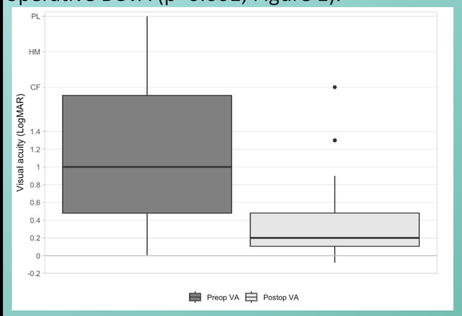


Figure 1: Whisker plot showing comparison of pre- and post-operative BCVA in logMar. Pre-operative VA was unavailable for 7 eyes and post-operative VA was unavailable for 13 eyes.

CONCLUSIONS

Patients are difficult to examine and VA measurements may not be accurate. Reasonable adjustments are needed in clinics e.g. pre-clinic visits, adaptable examination with retinoscopy, and allied health professionals for alternative VA testing.

More weight should be given to identifying the functional impact of cataract e.g. difficulty eating, using the remote, difficulty with stairs etc. Symptom-based questionnaires sent to carers prior to clinic may be useful.

Most patients can be operated under LA. Tolerance can be improved through tactics such as handholding, carers being allowed into theatre, and anaesthetist support. Multidisciplinary discussion in a BIM can help in selecting appropriate anaesthesia.

Outcomes are promising yet the literature shows that rates of cataract surgery in these patients is less than expected. We need to improve access to surgery for these patients.

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