

# PATIENTS' INTRA-OPERATIVE EXPERIENCES OF CATARACT SURGERY



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## INTRODUCTION

Cataract surgery is the most common surgical procedure in the UK, with over 400,000 done annually<sup>1</sup>. The vast majority of cataract extractions are performed under local anaesthesia. Despite this, there is little evidence in the literature that describes the peri-operative experience from a patient's perspective.

## AIMS

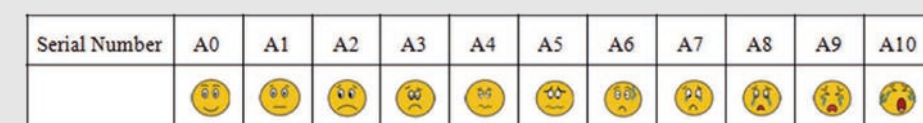
- To identify any correlations with pre-operative and intra-operative level of anxiety
- To investigate patients' intra-operative cataract surgery experiences

## METHOD

We prospectively interviewed 58 consecutive patients who were undergoing elective cataract surgery at Ninewells Hospital, Dundee in January 2021, using an anonymised pre and post-operative questionnaire comprising open and closed questions. We excluded any patients who had a complicated procedure.

Anxiety levels pre and intra-operatively were reported using a validated visual facial anxiety scale<sup>2</sup> (see Figure 1).

Wilcoxon Signed Rank test and Mann-Whitney U Test were performed, where relevant on SPSS 27.

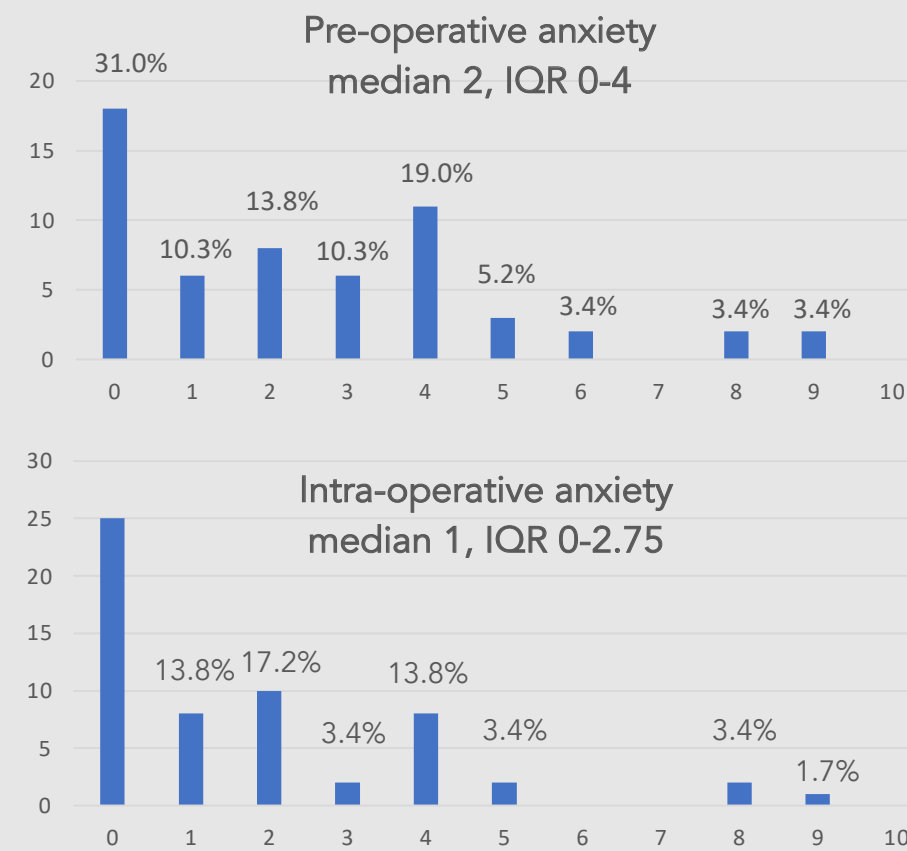


**Figure 1:** Visual facial anxiety scale - Facial expressions reflecting different levels of stress. no anxiety = A0, mild = A1, mild-moderate = A5, moderate = A7, moderate-high = A8 and highest anxiety levels = A10

## RESULT 1: Baseline demographics

FEATURE	STRATIFIER	VALUES
Age at Surgery	Median (IQR), years	76 (32-90)
Gender	Male : Female	28 (48.3%) : 30 (51.7%)
Ethnicity	White	58 (100%)
First Language	English	58 (100%)
Employment	Employed : Unemployed : Retired	6 : 1 : 51
Cataract Surgery	First eye : Second eye	32 (55.2%) : 26 (44.8%)

## RESULT 2: Pre-operative versus intra-operative level of anxiety



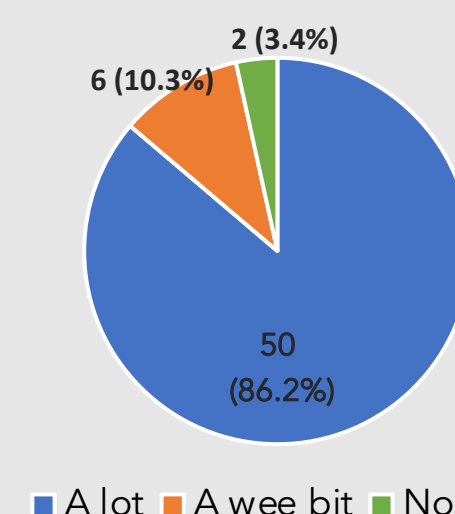
Overall, there was a statistically significant higher level of pre-operative compared to intra-operative anxiety. (z= 114.5, p=0.005)

## RESULT 3: Correlation between age, gender, eye operated, and pre and intra-operative levels of anxiety

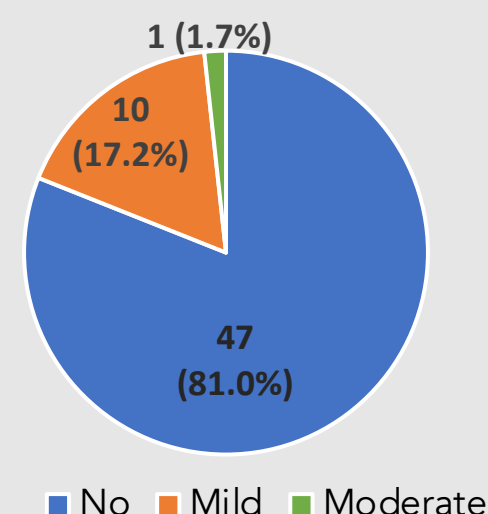
		Median pre-operative anxiety	Median intra-operative anxiety
AGE	>76	2	0
	≤75	2	2
	P value	0.368	0.0076
GENDER	Male (n=28)	1.5	1
	Female (n = 30)	2.5	1.5
	P value	0.298	0.549
EYE OPERATED	1 <sup>st</sup> Eye	2	1
	2 <sup>nd</sup> Eye	2	1.5
	P value	0.576	0.180

Patients with age >76 had a statistically significant lower median intra-operative anxiety score. There was no correlation between gender or first versus second eye operations and pre or intra-operative anxiety score.

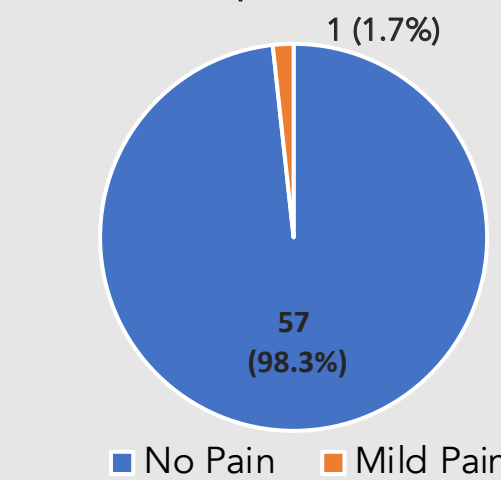
## RESULT 4: Did the presence of a nurse beside you make you feel less anxious?



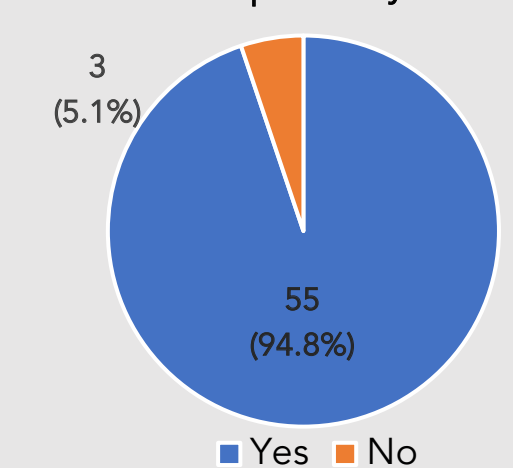
## RESULT 5: Did you find getting the local anaesthetic (sub-tenons) painful?



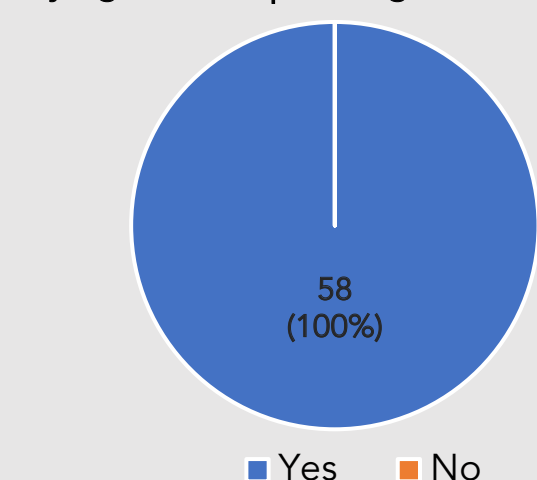
## RESULT 6: Did you feel pain during the operation?



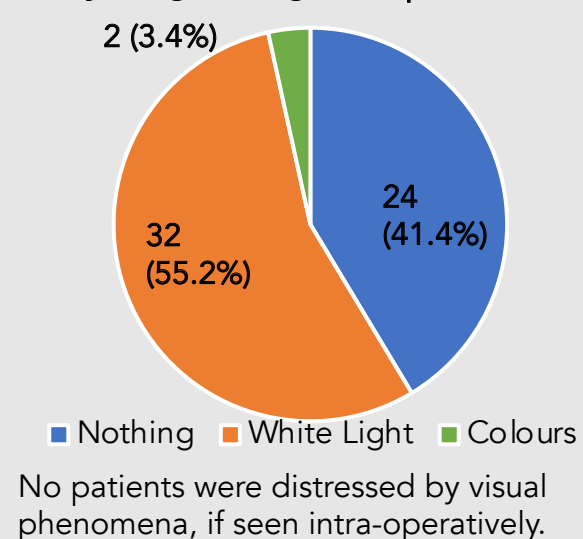
## RESULT 8: Was it comfortable to have a drape over your face?



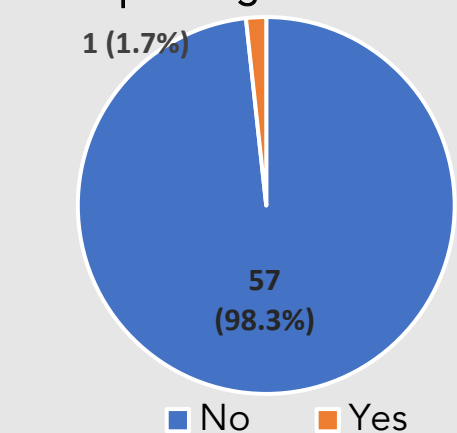
## RESULT 7: Was it comfortable lying on the operating table?



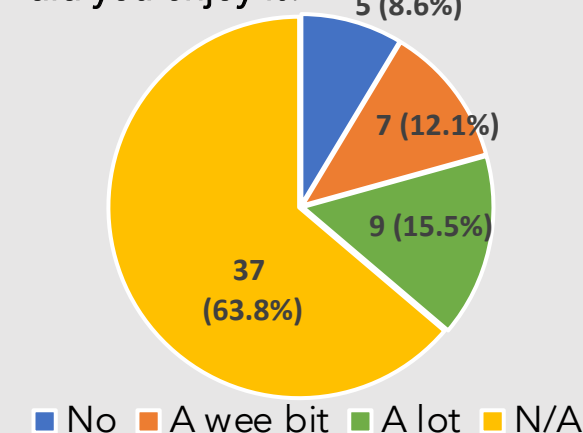
## RESULT 9: Did you see anything during the operation?



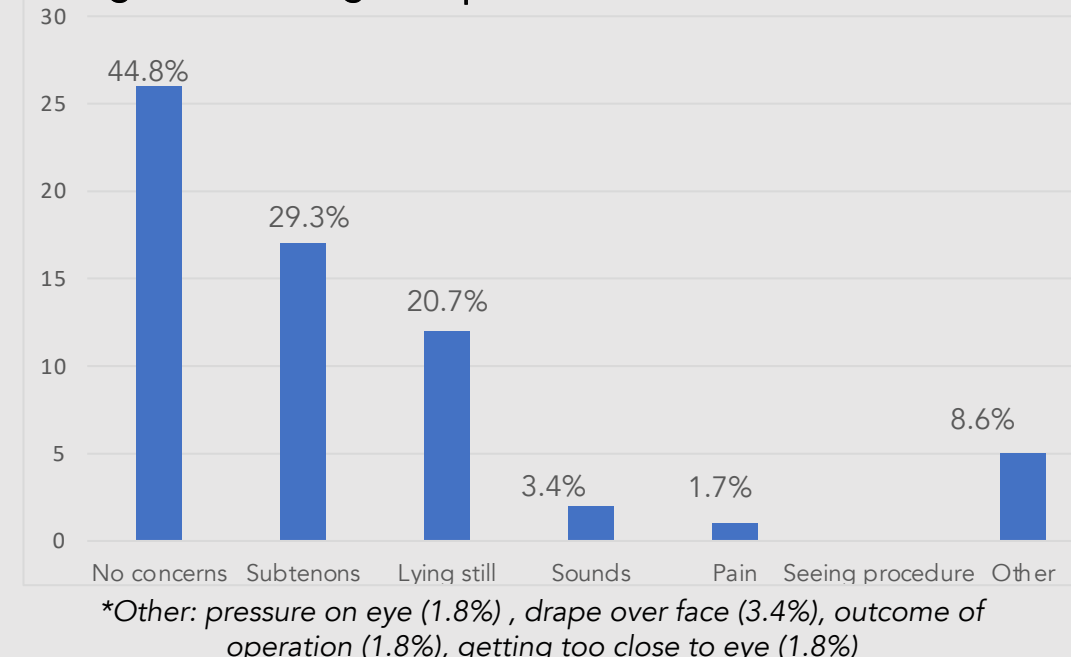
## RESULT 10: Were you distressed by any noise from the operating machine?



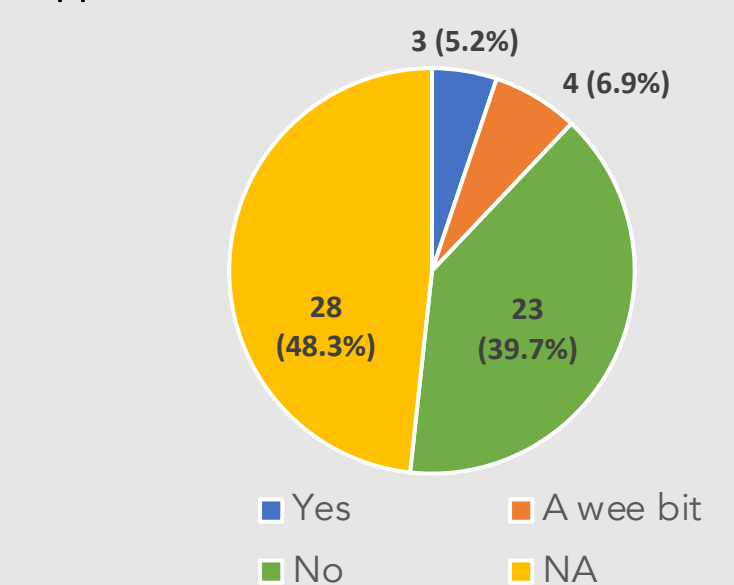
## RESULT 11: If there was music in the operating theatre, did you enjoy it?



## RESULT 12: What was your biggest apprehension regarding being awake during the operation?



## RESULT 13: On hindsight, was the apprehension warranted?



## RESULT 14: Miscellaneous

When asked what they remembered from the first eye operation, most second eye patients mentioned how efficient the procedure was. 6 out of 26 remembered the sub-tenons procedure. Only 1 patient felt the second operation was worse than the first (no recollection of receiving sub-tenons for first eye).

## CONCLUSION

Overall, patients reported a positive intra-operative cataract surgery experience, with almost all patients feeling no pain or distress from noise or visual phenomena. Patients were more anxious pre-operatively than intra-operatively. Older patients reported lower anxiety scores intra-operatively.

Our project has provided insight into anxieties patients may have regarding cataract surgery. The information we have presented can be used to reassure other patients when counselling them about cataract surgery under local anaesthesia.

## References

- Donachie PHJ & Sparrow JM. National Ophthalmology Database Audit. Year 3 Annual Report – The Second Prospective Report of the National Ophthalmology Database Audit. Healthcare Quality Improvement Partnership 2018.
- Cao, X., Yumul, R., Lazo, O.L., Friedman, J., Durra, O., Zhang, X., & White, P. (2017). A novel visual facial anxiety scale for assessing preoperative anxiety. PLoS ONE, 12.