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## Current trends of peri-operative cataract cancellations among consultant ophthalmologists in the United Kingdom

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A cancelled cataract operation costs an NHS trust £911 per patient [1]. Non-monetary costs such as the inconvenience to the patient are also important. In the current climate of efficiency savings and increasing waiting times, it is important to minimise these disruptions. Currently in the UK, The Royal College of Ophthalmology's Cataract Guidelines, 2017 [2] and Local Anaesthesia in Ophthalmic Surgery Guidelines in 2012 [3] state that blood pressure, blood glucose and INR measurements, are important factors to measure and control pre-operatively. The current guidance, however, does not give specific guidance of thresholds due to limited evidence. We were therefore interested to find out current practice to ascertain at which ranges for these parameters would warrant cancellation among consultants and whether local hospital guidelines are in place to standardise practices.

We carried out a 15-question survey (Fig. 1; www.surveymonkey.com) targeted at consultant Ophthalmologists across various trusts in the UK. A total of 304 consultants responded, representing 129 hospitals in the UK, and covering all Royal College of Ophthalmology specified deaneries. 35% (45) of these hospitals were reported to have a protocol for cataract cancellation in their hospital, but none of the consultants based at the same hospital gave the same parameters. Consultants from 34.9% (45) hospitals gave conflicting responses as to whether there was a protocol in place.

Of the 304 consultants, 88% (268) would cancel patients based on blood pressure; the majority (60%, 181) gave 180/100 mmHg as their upper limit.

Eighty-seven percent (265) of consultants cancelled based on INR reading, with 40% stating they would cancel if patients were above their therapeutic range, while others gave thresholds of 3 (35%, 108) or 4 (20%, 60), or that they would undergo surgery under topical anaesthesia. Eighty

Question number	Question	Responses
Question 1	What is your email address?  Which hospital are you based	
Question 2	in?	
Question 3	Do you have a cancellation protocol for cataract surgery?	Yes No
Question 4	Do you cancel patients based	Yes
	on blood pressure?	No
Question 5	At which blood pressure	< 90/60 mmHg
	reading, measured on the day	<90/60 mmHg with symptoms
	and just prior to surgery, would	<140/90mmHg
	you cancel an operation?	≥140/90 mmHg
		≥160/100 mmHg
		≥ 180/110 mmHg
		Other
Question 6	Do you cancel patients based on their heart rate?	Yes No
Question 7	At which heart rate reading,	<45 beats per minute (bpm)
	measured on the day prior to	>85 bpm
	surgery, would you cancel an	>95 bpm
	operation?	>105 bpm
		>115 bpm
		>125 bpm
		>135 bpm
		>145 bpm
		>155 bpm
Question 8	De you cancel nationts based	Other (please specify) Yes
Question 6	Do you cancel patients based on their blood glucose (BM) level?	No
Question 9	At which blood glucose reading	<4
	(BM), measured on the day of	>10
	surgery, would you cancel an	>15
	operation?	>25
Question 10	Do you cancel patients based	Other Yes
Question 10	on their INR?	No
Question 11	At which INR reading, measured	>2
	on the day/day before the	>3
	surgery, would you cancel an	> 4
	operation?	If the INR is more than the
		advisable therapeutic range in
		cases of metallic prosthetic
		implants and multiple DVTs. Other
Question 12	If the nations is an any of these	Yes
	If the patient is on any of these anticoagulants (aspirin,	No No
	clopidogrel, rivaroxaban,	
	apixiban, dabigatran, heparin,	
	low molecular weight heparins)	
	do you advise them to stop	
	them prior to surgery?	
Question 13	Do you cancel patients if these	Yes
Question 14	anticoagulants (aspirin,	No
	clopidogrel, rivaroxaban,	
	apixiban, dabigatran, heparin,	
	low molecular weight heparins)	
	have not been stopped prior to	
	surgery?	Cama day
	Please specify the number of	Same day 2 days
	days these anticoagulants (aspirin, clopidogrel,	3 days
	rivaroxaban, apixiban,	4 days
	dabigatran, heparin, low	5 days
	molecular weight heparins) are	6 days
	stopped before surgery	7 days
		Other
Question 15	When do you resume the	Same day
	anticoagulants if they were	Next day
	stopped prior to surgery?	2 days
		3 days
		4 days 5 days
		6 days 7 days

Fig. 1 Questionnaire sent out to ophthalmology consultants

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one percent (246) said they do not stop other anticoagulants (including aspirin, clopidogrel, heparins and novel oral anticoagulants) prior to surgery.

Seventy-eight percent (236) of consultants cancelled based on blood glucose, with 40% (121) stating above 25 mmol/L, and 32% (97) above 15 mmol/L.

Of all the criteria, heart rate gave the most variable response, with only 40% (123) considering it as a reason for cancellation. There was a huge variety in the upper limit, and symptomatic tachycardia understandably was the most important reason (14.8%, 45) rather than the rate.

Consultants across the UK show some consensus on when to cancel patients in relation to blood pressure, blood glucose, INR level and most do not routinely stop other forms of anticoagulation. However, there remains some variability in practice, which is understandable given the lack of specific guidance at present. Studies looking at the influence that these factors may have on cataract surgery are currently limited. A national audit looking at these parameters in relation to complications may be warranted. Our

survey highlights a need for more exploration into the immediate pre-operative management of patients.

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## Compliance with ethical standards

Conflict of interest The authors declare that they have no competing interests.

## References

- 2016–2017 National Prices and National Tariff Workbook. NHS England and Monitor. https://www.gov.uk/government/publications/nhs-national-tariff-payment-system-201617. Last accessed 05/01/2018
- Cataract surgery guidelines October 2017. Royal College of Ophthalmologists/NICE. https://www.nice.org.uk/guidance/ng77. Last accessed 05/01/2018
- Local Anaesthesia for Ophthalmic Surgery. Joint guidelines from the Royal College of Anaesthetics and the Royal College of Ophthalmologists. February 2012

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## A model of clinical practice: a randomised clinical study evaluating patient satisfaction of nurse-led vs consultant-led intravitreal injection

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Intravitreal injection treatment (IVT) is the most commonly performed ophthalmic procedure [1]. Evidence now shows that nurse-led IVT achieves comparable safety, visual outcomes and complication rates as consultant-lead care [1–3]. However, patient satisfaction of IVT by non-ophthalmologists, an increasingly common practice [4], has been poorly studied. This is concerning, given the importance of patient

satisfaction in assessing the quality of medical care and determining levels of treatment viability, therapeutic compliance and malpractice litigation. Our aim was to compare patient satisfaction of nurse-led vs consultant-led IVT.

Patients attending the macular treatment clinic at Central Middlesex Hospital were invited to take part in the study. A total of 61 patients agreed to participate and were subsequently consented and randomised to receive IVT treatment by either the trained clinical nurse (n = 34) or by the consultant (n = 27)—the 'gold standard'. A modified, validated patient questionnaire (PSQ-18), see Fig. 1, was used to determine six aspects of patient satisfaction. Responses to each item were given a 5-point scale ranging from strongly agree (5 points) to strongly disagree (0 points). A painscale,

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