

Improving patient safety in cataract surgery

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Patient safety is an international concern in every hospital speciality as well as in general practice.¹ Medical errors are estimated to occur in 10% of admissions.² The trend is to try to improve systems, rather than blame individual healthcare workers. Recent patient safety initiatives in the United Kingdom include the formation of the National Patient Safety Agency (NPSA) (www.npsa.nhs.uk). Clinicians are encouraged to report incidents, adverse events, and near misses either through local NHS Trust risk management systems, or directly to the NPSA (www.npsa.nhs.uk/health/reporting/reportanincident), in efforts to learn from these incidents. The Royal College of Ophthalmologists is to be congratulated as one of a small number of medical Royal Colleges to have provided a menu of suggested patient safety incidents to report.

Patient safety in cataract surgery is both topical and important due to the volume of cataract surgery, extremely high patient expectations, and the increasing trend towards surgery for milder lens opacities. The comprehensive and yet concise review article by Kelly and Astbury,³ the first of its kind in ophthalmology, is therefore timely. It makes essential reading for every member of the cataract surgical team, be they surgeons, nurses, or technicians. Decision makers in healthcare from ministers to managers can contemplate from this review, just how many things can go wrong and measures that might improve patient safety.

In NHS care in the United Kingdom, there are additional factors that could affect patient safety in cataract surgery. These could be grouped into pressure of throughput, commercial pressure and threats to surgical training.

Aims to improve throughput started in 2000 with the *Action on Cataract* initiative.⁴ The scheme aimed to improve patient-care pathways with direct optometric referral,

reducing waiting times, and high volume surgery. The current waiting time target is 3 months for first eye cataract surgery in England. To improve efficiency, some units have adopted production line-like cataract operating lists. Kelly and Astbury³ describe the necessity for down time so that the entire cataract surgical team pauses to ensure that the correct patient, operative procedure, site, and side are checked. The profession must put patient safety at the heart of our practice rather than having targets or throughput as our aspiration; the latter should be left to healthcare management, and perhaps are the concerns of policy makers and politicians.

There is much to be said for strict or standard protocols in the operating theatre. Changes to operating lists should be avoided, if at all possible. Adequate time for writing accurate operating notes, endorsed by the signature of the operating surgeon, is needed. Local 'trials' or demonstrations of new equipment, instruments, and intraocular implants should be carried out within more formal arrangements than are currently practised. Day 1 follow-up, which is now increasingly omitted, should take place should there be a variation of routine. It may even be argued that intraocular lens contracts should only be negotiated infrequently, perhaps every 3 years or so, as the whole team from preassessment to surgeon and technician will need to get used to new IOL constants and surgical technique. Every change in surgical detail involves a new learning curve. This has been ascertained for residents changing from a superior to a temporal incision (Cremers: personal communication).

Each member of the surgical team in the operating theatre needs to know their role within a well-defined system of delivery of surgery. When such systems or drills are in place, little is left to chance. Permanent staff are preferable to agency staff, who often may not be familiar with working practices in unfamiliar environments. Those whose first language is not

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English should have an adequate knowledge of the language, both in speech and comprehension. It is vital that nursing staff are allowed time for continuing professional development. While it may be necessary to rotate nursing staff between pre-assessment, the ward, and operating theatres, there is no place for the occasional ophthalmic theatre nurse.

Another important topic is to ensure that healthcare facilities are regularly maintained and cleaned. All the equipment should be in good working order. Theatre air conditioning and filtration, including correct positive pressure laminar flow systems, need to be regularly checked.

The advent of the *Patient Choice, Choose and Book*, and *Payment by Results* initiatives in the United Kingdom may well mean that providers will only survive if they have adequate 'business'.⁵ This may force some units to close, if running costs are too high. Pressures may include staff costs (a common problem in the South of England), the age of the buildings and facilities, or even inadequate car parking! Traditional NHS ophthalmology units may well stand to lose most with *Payment by Results*, a fixed national tariff system, as they often have to operate on more complex cases and cases with co-morbidity. Risk stratification in cataract care has not yet been fully validated, and just how much more complex cases do cost has not been ascertained.^{6,7} At the same time, independent sector treatment centres are, it is alleged, reimbursed at a higher rate per case, and allegedly only operate on routine cases. As payment follows each patient, and there is a threat to survival, all contractors including 'traditional' NHS providers will be under pressure. Will we see perverse practices such as clear lens patients on waiting lists, in order to bring revenue in to providers? Can NHS eye units remain viable if the national tariff does not cover overheads?

All patients know the importance of finding a good surgeon, and in the United Kingdom, higher training in ophthalmology is under the watchful eyes of the Royal College of Ophthalmologists and postgraduate deaneries. There are many changes afoot such as *Modernising Medical Careers* (MMC) and reducing working time according to the European Working Time Directive (EWTD). While there is merit in having a run-through grade for training, it is vital that time available for training is not decreased. Doctors in training may only work a maximum 58-h week now, reducing to 48 h by 2009, including resident time on-call. Full shift working may decrease time spent with trainers. Will

there be adequate time for the traditional apprenticeship and role-modelling systems to continue?⁸

To conclude, we need to build a culture of patient safety. To err may well be human, but in healthcare errors need to be minimised. When caring for patients we need to work with discipline and precision, leaving nothing to chance, in order to ensure safety. Personnel should not be inhibited in checking and rechecking. Surgeons are sometimes compared with airline pilots. The surgeon should also do all the 'preflight' checks and be able to raise concerns about safety without fear or blame.

We should be able to discuss whether it is in patients' interests to aim for a 100% day case rate, and to operate on all cases under local anaesthesia. Other controversial issues such as not wearing surgical masks and live surgery should also be carefully considered.

There is now a possibility of closure of traditional NHS units with multispeciality skills and support, in favour of ambulatory cataract units. This, together with trivialisation of cataract surgery, possible shortening of surgical training, and the possibility of nonmedically qualified surgeons could threaten patient safety in cataract surgery. The NHS in England may end up without the expertise and facilities to manage complex ophthalmic cases and complications. The implications are wide ranging and should be considered and debated at the highest levels. Patient safety in ophthalmology needs to be seen beyond cataract surgery.

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