

“Learning from problems”

The first ophthalmology case reports from CORESS: the Confidential Reporting System for Surgery

Learning the lessons from problems, mistakes and near-misses is essential to the development of a high-quality service. The RCOphth recently joined CORESS, the national system for disseminating lessons from these problems. We are pleased to publish here the first ‘ophthalmology CORESS case reports’.

We hope that these stories will encourage higher standards of care and better outcomes for our patients. If you’ve got a story you’d like to share, please file a very brief report via www.coress.org.uk. All reports are treated anonymously, and you’ll get a reporting certificate which is useful for your appraisal.

More importantly, patients can be reassured that ‘the incident has been reported to other eye doctors, so hopefully it won’t happen again.’

Published cases will also appear on the CORESS and RCOphth websites. Submitting to CORESS does not replace the requirement to report incidents via local/national patient safety reporting systems.



This principle applies to many other situations in medicine and surgery. Positive identification of patient, procedure (and side) is also vital for many other situations, including the ordering and interpretation of tests.

Case 2 - Gonioscopy: how wrong can you be?

A man of 71 was referred to ophthalmology by his optometrist, with suspected narrow anterior chamber drainage angles. The optometrist was concerned that the patient was at risk of developing ‘acute glaucoma’ if nothing was done to prevent it. Gonioscopy was done by a trainee who was highly experienced with the Goldmann gonioscopic contact lens, but unfamiliar with the 4-mirror goniolens.

Using the 4-mirror lens, the trainee recorded that the angle was open, reassured the patient and discharged him. Two months later, the patient returned as an emergency with a painful red eye and blurred vision, due to Acute Primary Angle Closure (‘acute glaucoma’, with confirmed narrow angles). This required medical treatment, laser iridotomies, and eventual cataract surgery to control the pressure.

CORESS comments

The 4-mirror gonio lens (e.g. Zeiss, Posner, Sussman) has a small central portion, making it easy to indent the cornea. Thus, pressing on the cornea with the 4-mirror lens will indent the central cornea, thereby opening up a narrow iridocorneal angle. This is the principle of indentation gonioscopy, which can give a lot of useful

additional information. However, this does mean that if one inadvertently presses when using the 4-mirror lens, the angle may appear open when it is in fact narrow.

Ophthalmologists should be aware of this potential pitfall. There are helpful training videos on-line. When learning this technique, it is probably safest to get a second opinion from an experienced colleague.

Case 3 - Lost surgical sponge

A 68 year old patient with uncontrolled glaucoma underwent trabeculectomy surgery to the left eye, under local anaesthesia. Five small sponges, soaked in antimetabolite, were placed under the sub-Tenon’s space for 3 minutes, as per standard practice. At the end of the 3 minutes, two of the five pieces of sponge could not be retrieved - it was assumed that they had migrated backwards between Tenon’s capsule and the sclera. Repeated attempts at removal with forceps seemed to push the sponges further back, and eventually resulted in significant orbital haemorrhage. The sponges were finally removed by an orbital surgeon under general anaesthesia: one was found behind the macula, and the other had migrated to the tendon sheath of one of the rectus muscles. Thankfully, no harm came to the patient’s vision.

A colleague told us how to avoid this situation in future. ‘Lost sponge’ can be prevented by threading the sponges onto a suture beforehand, and tying it in a loop, like beads on a necklace. We use 6/0 or 5/0 nylon. This makes surgery quicker as well as safer. Sponges could still potentially come off the “necklace”, so they must still be counted in and out of the eye.

CORESS comments

The sub-Tenon’s space is a potential space between the sclera and surrounding Tenon’s capsule, extending to the back of the globe and around the extra-ocular muscles. There are several other surgical ‘potential spaces’ in the body (eg pleural cavity, pericardium), and surgical sponges or other material could be lost in any cavity or potential cavity. As in this case, ‘blind’ attempts to remove a sponge may inadvertently push it further into the cavity.

Where possible, it is recommended that surgeons use sponges/swabs that are pre-attached to a handle, thread, ribbon, or other system to prevent them getting ‘lost’. For situations like this where pre-threaded sponges are not commercially available, we recommend that sponges are tied securely to a circular loop of thread before they are put in to the patient. All surgical swabs, sponges etc should be counted in, and counted out, of the patient.

Case 4 - Pre-operative surgical checklist (again)

After a routine cataract operation, the patient was found to be myopic (needing strong spectacles) when the intention had been to aim for emmetropia (no distance glasses). Investigation of this incident revealed that another patient with the same name had recently also undergone cataract surgery in our unit. Pre-operative biometry had not been filed in the case-notes for our patient, so the biometry report had to be re-printed: this was done using the other patient’s data in error. The dates of birth of both patients, although not identical, contained similar numerals. This led to the wrong lens being inserted into a patient.

Two main factors contributed to this incident. Re-printing of the biometry was done without a careful confirmation of the patient’s identity- therefore the printout was done for a different patient, who happened to have the same name. During the pre-operative WHO check, the biometry printout was checked using one identifier only (patient name) and not date or birth or hospital number. Therefore, this error was not picked up in the pre-operative check.

CORESS comments

This is another case which highlights the importance of checking patients’ identity at all stages of the medical process. Patients should be asked to state their name, date of birth, and address prior to any aspect of care. WHO pre-operative checks should ensure that all critical data (e.g. imaging, biometry, pre-operative examination findings) are of the correct patient.

Account of Incidents

Case 1 - Things can go wrong when a patient says ‘Yes’

During an ophthalmology outpatient laser clinic, another patient came to my clinic room instead of the patient I had actually called. I think she must have mis-heard the name that I called. We discussed the scheduled treatment (laser iridotomy), she signed a consent form with the other patient’s sticker at the top, and I performed YAG laser iridotomies on her. Unfortunately, the patient I treated had been listed for selective laser trabeculoplasty, and so she ended up having the wrong laser procedure.

I did not check her date of birth, and the patient had answered “Yes” when I asked her if she was Mrs X. Soon afterwards, I realised what I had done. I immediately told the patient what had happened and notified this event to my Trust as a Serious Untoward Incident. Thankfully, no harm was done.

CORESS comments

This case illustrates the dangers of ‘passive’ identification of patients. It is easy for a patient to mis-hear a question and then inadvertently agree with the clinician. This problem would not have occurred if the clinician had actively followed the principles of the WHO pre-operative checklist.

The patient should be asked ‘please tell me your name’, with similar open questions asking the patient to state their date of birth, address, planned procedure and side to be treated.

FACTOID from the Quality and Safety Group

According to a recent issue of the British Journal of Ophthalmology <http://bjo.bmj.com/content/98/1/141>, a patient undergoing laser capsulotomy suffered macular burns reducing her vision from 6/18 to counting fingers. The dual mode laser had been set to selective laser trabeculoplasty instead of YAG.