Wrong implants a theme in errors

Ophthalmology and orthopedics led the list of OR specialties with incorrect surgery in an analysis of 5 1/2 years of data from 130 Department of Veterans Affairs (VA) facilities.

A wrong implant was the most common error type for both specialties, accounting for 22 of 45 ophthalmology events and 12 of 26 events in orthopedics. For eye surgery, the most common error was a lens mix-up. For orthopedics, it often was not having the right size of implant available. The report is in the November 2009 Archives of Surgery.

Overall, there were 210 errors between 2001 and 2006, evenly split between those that occurred in the operating room (51%) and elsewhere in the hospital (49%). Invasive radiology led the list for incorrect procedures outside the OR.

The rate of incorrect procedures was:
- ophthalmology: 1.8 in 10,000 cases
- orthopedics: 1.2 in 10,000 cases.

None of the other top 7 surgical specialties with errors had rates reaching 1 per 10,000 cases.

The top root cause, as in other reports, was communication breakdowns. Examples were informed consent issues or handoffs where information was missed. Time-out problems were the second leading root cause. But the time-out alone is not enough to prevent errors. The VA advocates improving communication earlier in the process using principles of crew resource management.

Five steps for prevention

The VA rolled out a 5-step preop verification process in 2003, before the Joint Commission introduced the Universal Protocol (sidebar, p 6).

"In over 200 reports of actual adverse events, we didn’t have any hospitals claiming that they followed the required processes, and the adverse event happened anyway—there was always some step skipped or done incorrectly," James P. Bagian, MD, one of the authors and the director of the VA’s National Center for Patient Safety, told OR Manager. (This does not include incorrect procedures caused by a pathology mixup before the patient is admitted for surgery.)

When the processes were compared against known cases, 100% of the cases found retrospectively would have been prevented by the 5-step process.

“What we see are things such as they didn’t mark the site or do the time-out, or patients weren’t asked their name and didn’t speak up when they were taken for a wrong procedure,” he says.

Following the 5 steps doesn’t mean the time in the OR is any longer, he adds. “Instead of talking about last night’s football game, the discussion can revolve around the procedure.”
Individual performance

Because the 5 steps have such a strong track record, Dr Bagian says now when there is an event, the first consideration should be an administrative investigation, not a root cause analysis.

“The assumption now is that it’s an individual performance issue until shown to be otherwise,” he says. Unlike a root-cause analysis, an administrative review can result in sanctions and is discoverable in a legal action. Examples of performance issues are nurses who don’t properly check the patient’s identity, a surgeon who blows off the time-out, or an anesthesia provider who doesn’t intervene when the time-out isn’t followed.

“The surgeon might be behaving like a jerk, but that doesn’t mean others can just stand by and do nothing—there are at least 3 responsible parties,” Dr Bagian says. “Everyone knows what the rules are. If it’s just someone’s preference not to follow them rather than do what is best for the patient, that’s not OK.”

The VA has rolled out a version of crew resource management called Medical Team Training over the past 6 years, which he says has made a difference.

Data from the first 110 facilities that adopted the training show the mortality rate decreased, nurse turnover declined by about 30%, more cases started on time, and other problems were caught, such as a patient’s INR level that was out of range. (INR is the international normalization ratio, a measure of blood-clotting tendency.) The results are being submitted for publication.

Reference


Ensuring correct surgery

Five-step process from the Department of Veterans Affairs:

1. **Consent form**, including the patient’s own description of the problem to be treated, for example, “My knee locks.”

2. **Mark site.** The site is marked before the patient enters the OR by a licensed provider who is a member of the operating team (not the circulating nurse or anesthesia provider). The site is marked for all procedures, including those for which the Joint Commission allows an exception, such as procedures involving a midline incision. That way, the surgical team knows something is wrong if a patient enters the OR without a mark, says James P. Bagian, MD, director of the VA’s National Center for Patient Safety.

3. **Patient identification.** The OR staff asks the patient to confirm his or her name, Social Security Number, and date of birth. The responses are checked against the site mark, ID band, consent form, and other documents.

4. **Time-out.** With the patient present, the surgeon, nurse, and anesthesia provider confirm the correct patient, positioning, site mark, procedure, and availability of correct implant. “The surgeon, nurse, and anesthesia provider are equally responsible and go through the time-out together,” Dr Bagian says.
5. **Imaging data.** If imaging data is used to confirm the surgical site, 2 members of the OR team must confirm the images are correct and properly labeled.

Source: www.patientsafety.gov/SafetyTopics.html#ECS