Opinion: Who did my surgery? Modern day issues of consent in surgical education

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Many consider that practicing medicine is an art form as opposed to an exact science. This is especially apparent in the surgical disciplines where the breadth of factors involved in the decision making are great at every step of the patient journey; from pre-operative workup right through to the intraoperative decisions and post-operative care. Surgical training has followed an apprenticeship model with doctors gaining experience by being actively involved in patient care.

Although contemporary surgical training is far from the old adage of; "See one, do one teach one", doing remains an integral part of acquiring the technical skills required to be a surgeon. Societal expectations of who will be undertaking their surgery and the amount of information they require have also significantly changed. There are multiple cases worldwide of complications arising from surgery where societal blame has been attributed to "surgical training". A recent New Zealand case means we are not immune.

A recent ophthalmology example occurred when a surgical Fellow (post-Fellowship trainee) had an extremely rare but catastrophic intraoperative complication whilst performing a very delicate eye procedure. This led to the patient losing sight in the operated eye. The Fellow was being supervised by a qualified ophthalmology consultant who was scrubbed and assisting him. A complaint was made to the Health and Disability Commissioner (HDC) as the patient claimed she was not aware she was being operated on by a doctor as part of training.[1] The HDC review found the individual doctors and the hospital involved were in breach of the patient's right to be informed of their participation in training and attributed the complication in part to the training of the Fellow.

The above case raised many questions amongst the medical community. What does this mean for training? Does this mean that we cannot undertake training without being a risk to patients? How does one obtain consent for I training if it is inevitability associated with complications? How do we ensure the patients' rights are met whilst ensuring we continue to train future generations of surgeons and physicians? Are the two issues at odds?

The Royal Australasian College of Surgeons (RACS) is a leading advocate for the surgical community and has the overriding responsibility for surgical training in Australia and New Zealand. The RACS Trainee Association (RACSTA) represents trainees at the College level. RACSTA took the initiative to help assess the impact of the case on New Zealand surgical training with support from the RACS National Board in New Zealand (NZNB). As part of unpicking the issues above, RACSTA undertook a systematic review of the literature on the issue of safety in surgical training. We also surveyed NZ surgical trainees to identify any impacts the case has had on their training. Finally, representatives from the NZNB with the NZ RACSTA representative met with Anthony Hill, current Health and Disability Commissioner and his deputy Dugal Meenal to discuss the case and its implications.

The rest of this article poses some questions around this topic and sets out to answer them given the insights gained from the above journey.

THE PATIENTS RIGHT TO BE NOTIFIED OF TEACHING. SHOULD ALL PATIENTS BE ASKED?

The Code of Patient Rights in New Zealand states under Right 6: The Right to be fully informed that "Notification of any proposed participation in teaching or research, including whether the research requires and has received ethical approval'.[2] Therefore, patients must be informed if they are participating in teaching and have the right to refuse such participation. In the ophthalmology case, the doctors involved claim to have undertaken such an explanation of who will be undertaking the surgery but this was at odds with the patient and their family members' recollection. There was no documentation that such permission for teaching was obtained. Hence the HDC found that there was a breach of the patients' rights. Furthermore, the hospital policy stated that involvement in teaching should be documented in the clinical notes which had not occurred. The above case is by no means isolated to New Zealand. Similar cases have occurred in Australia.[3]

Therefore, it is not only required that patients are adequately informed of their participation in teaching, but that such discussions are recorded in the clinical notes. Recollection bias affects any retrospective assessment and patients meet a myriad of team members on admission to hospital, hence it is easy to see how they could get confused. Having such documentation protects the student (at whatever level they may be) in case of any incidents or future review. It has been said that "If it is not in the notes then it did not happen".

WHO SHOULD OBTAIN CONSENT FOR TEACHING?

Having established that the patients must be informed of teaching participation and that this consent should be documented, questions arise

as to what informed consent means and who should seek this consent. As with any form of informed consent, the barometer of judgment would be the expectations that a reasonable person would expect to be given in any given situation. Context is everything.

Elective surgery is different to trauma or emergency surgery in the sense that more detailed discussions can occur prior to surgery. Not all elective surgery is the same. Knee arthroplasty for example is different to gender reassignment or breast augmentation surgery where patients may have a different threshold for their privacy. In the knee arthroplasty case it would be entirely appropriate for students to introduce themselves to the patient and obtain consent for their involvement in surgery. This ideally should be backed up by a more senior member of the surgical team. However, in the case of gender reassignment surgery it is ideally best for the supervising surgeon to obtain consent for all teaching and training that would occur, to ensure that there is no duress for the patient. Furthermore, where possible, students should introduce themselves to the patients and check that documentation for their participation has been included.

SO HOW MUCH INFORMATION SHOULD BE GIVEN TO THE PATIENT FOR AN INFORMED DECISION?

Informed consent relies on discussions with patients and should always be an individualised endeavour. The Code of Patient Rights lends more guidance here, stating that: "Before making a choice or giving consent, every consumer has the right to the information that a reasonable consumer, in that consumer's circumstances, needs to make an informed choice or give informed consent.".[2] When it comes to participation in teaching this may commonly include the identity of the students, their number, the extent of their involvement in surgery, their supervision or delegated authority and finally any associated risks involved with that teaching.

BUT TEACHING SURGERY IS ALWAYS RISKY, ISN'T IT? SO HOW WILL YOU OBTAIN INFORMED CONSENT FOR THAT?

It is a commonly assumed that acquiring surgical skills comes at an increased risk to patients. This belief is held by many doctors let alone the common public whose perceptions are so frequently influenced by contemporary media (such as medical television shows). The recent NZ RACSTA trainee survey highlighted that only 50% of surgical trainees were aware of any medical literature that supports safety of surgical training.

To examine the above hypothesis, NZ RACSTA undertook a literature review examining the last decade's literature on issues of safety in surgical training with assistance from RACS library staff. We reviewed 37 articles across seven different specialities. Many of these were retrospective reviews of the American College of Surgeons National Quality Improvement Program (ACS-NSQIP), which is a very large high quality database. The reviewed articles included articles examining both elective and emergency surgeries. In the articles, patient numbers varied from a few hundred to >50,000 patients. The papers had a variety of endpoints with short term (30 day) morbidity and mortality being the most commonly reported. Several papers also examined the medium to long-term impacts of training such as cancer free survivorship or 10-year arthroplasty results.

The consistent finding in the above literature was that supervised trainee involvement in surgery was not associated with increased short or long term risks especially in the elective setting. The only exception was emergency general surgical procedures where an increase in perioperative morbidity rates was documented. Consistently, however, the operative times were longer when a trainee was involved in surgery. This could explain the increased morbidity rates documented in emergency surgical procedures as patients are an already in a pro-inflammatory state.

SO CASE SETTLED THEN! SURGICAL TRAINING IS ALWAYS SAFE.

Life is never full of absolutes. The above literature review provided evidence-based backing that appropriately supervised surgical training is safe in most contexts. Whenever applying literature to one's practice it is important to establish if the context is similar and if the research findings are generalisable. Most the published literature was North America based, where trainee surgeons tend to be less experienced than their New Zealand and Australian counterparts given the different modes of selection onto surgical training. Therefore, based on surgical experience alone, one could assume that if supervised, Australasian trainees should likewise be safe. Furthermore, some of the published literature from the New Zealand joint registry backs this observation showing that revision rates for hip joint arthroplasty are similar in trainee supervised joint replacements to those performed by consultants.

The individual patient context is paramount and the risk assessment needs to be individualised to the patient's situation. It is important to clarify what is meant by risk. In medicolegal terms, patients should be notified of unmitigated "material risks". The High Court of Australia stated that "a risk is material if, in the circumstances of the particular case, a reasonable person in the patient's position, if warned of the risk, would be likely to attach significance to it or if the medical practitioner is or should reasonably be aware that the particular patient, if warned of the risk, would be likely to attach significance to it".[3]

Therefore, risks are to be identified by both the surgeon and patient, and doctors should discuss risks they think are significant for the patient. When it comes to teaching, such discussions of risk need to be highlighted when any material risks are not reasonably mitigated in that context. Most medical student teaching is very closely supervised and involves observation of surgical procedures, assisting by holding retractors or simple technical tasks such as suturing wounds. It is hard to imagine an unmitigated risk occurring in that setting. Therefore, other than seeking permission for the students to be present/involved, no specific discussions need to be had regarding risks associated with teaching in these circumstances.

In comparison, an advanced surgical trainee, undertaking a highly complex procedure such as decompression of spine in a revision setting, where adhesions are present, may indeed carry an increased risk to the patient even if the trainee is being supervised. In this setting, the risks associated with training are not mitigated and they need be discussed with the patient.

SO THESE DISCUSSIONS CAN BE VERY DIFFICULT! AREN'T SURGEONS GOING TO SHY AWAY FROM THIS?

Being a surgeon means ascribing to a set of common values inherent to the vocation. Patients and society demand our trust. Trust cannot be established without us meeting our expectations to the society that we serve and we must adhere by the Patients Code of Rights. Therefore, if we are to truly obtain informed consent, then as surgeons we should strive to meet those obligations. Many aspects of surgery are difficult. Surgeons get good at what they do through deliberate practice. This also applies to the issue of consent.

The striving to meet those expectations is inherent to the nine core competencies that RACS aspire to attain in its surgeons. Communication, judgement, professionalism and ethics and finally scholarship and teaching all apply here. These are all part of the so called "non-technical" aspects of surgery. Arguably these are more important than the technical aspects because otherwise surgeons would be mere technicians on a production line. It is our hope that future surgeons will rise to the challenges of obtaining meaningful consent from patients which routinely includes the need for teaching and training.

LET'S SAY SUCH CONSENT DISCUSSIONS ARE HAD; DOCUMENTING SUCH CONSENT IS DIFFICULT, ISN'T IT?

There is no doubt about that especially with the advent of the electronic medical record. RACSTA recognised that there are variations across hospitals in New Zealand with regards to the documentation of surgical

consent and patient participation in surgical education. 94% of trainees responding to a special RACSTA survey indicated their hospital consent forms did not stipulate if they could attend or participate in surgery. We also recognised that relying on individuals to document discussion about consent in the clinical notes would be likely to have poor compliance. To improve this documentation, the NZ RACSTA representatives are currently reviewing the perioperative documentation form across all District Health Boards (DHBs) to establish if these all meet the requirements and to assess if they specifically capture the patients' willingness to participate in the teaching of all health professionals involved with their care (including students). RACSTA hopes that this will reduce the burden on those seeking consent from patients and would normalise it to be a standard part of obtaining consent for surgical procedures nationwide.

SUMMARY

We live in a world of increased societal expectations regarding information and informed decision making. Recent cases highlight the need for patients to have an informed discussion regarding their involvement in surgical training. It is ultimately the patient's right and we must strive to deliver care in a manner that preserves those rights.

TAKE HOME MESSAGES

- Patients have a right to informed consent for trainee/ student participation in surgery.
- Documentation of patients' consent to participate in teaching is critically important.
- Familiarise yourself with your hospital's policy on documentation of teaching consent.
- Be cognisant of the patients' context.
- Medical student involvement in surgical teaching is unlikely to be associated with an increased risk to patients.

REFERENCES

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