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Review Article

Effective Things Surgeons Can Tell Patients During Wide-Awake Local Anesthesia No Tourniquet Surgery to Decrease Complications and Improve Outcomes

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Surgeons are familiar with surgical technique articles that provide step-by-step details of various surgical procedures relevant to clinical practice. This article is a communications technique article that provides step-by-step things that a surgeon can say to a wide-awake patient during the surgery to improve outcomes in clinical practice. The absence of anamnestic sedation enables memorable patient education from their surgeon to decrease the risk of postoperative complications.

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Like many hand surgeons, I learned the art and science of operating in the main operating room. Patients were there to have surgery, not for any kind of meaningful discussion. In fact, more than 90% of the conversations during surgery usually had nothing to do with the patient. Surgeons mostly shared stories with anesthesiologists, nurses, and trainees about social issues and events of the day unless the conversation steered to surgical education.

In 1984, my first year of practice saw carpal tunnels and trigger fingers move to unsedated local anesthesia. By the year 2001, more than 95% of my hand surgery had switched to wide-awake local anesthesia no tourniquet surgery. With each passing year, the focus of intraoperative conversation moved away from talking to nurses about “the weather” to concentrating on the most important person in the operating room, the patient. Clearly, every operation has times of focus where less talking is better than chatter. However, times like skin suturing require less focus and are good opportunities for patient education.

Most unsedated, pain-free patients love the opportunity to speak to their surgeon during the surgery or while they are being injected with pain-free local anesthesia. They want their surgery to be successful so they can solve their problem and resume their life as soon as possible. This is the best opportunity for patients to speak to us when we are both uninterrupted. I have learned over and over that effective things can be said to patients during surgery to decrease complications and improve outcomes in this time of their great thirst for knowledge from their surgeon. Over the years, my intraoperative spoken words of advice have been carefully modified to improve their effectiveness. The purpose of this article is to relay some of the quoted intraoperative messages that I currently believe to be the most effective in the intraoperative education of patients during wide-awake local anesthesia no tourniquet.

Communication Strategies

The indented quotes represent 37 years of refinement in the art of doctor-patient communication. All are direct quotes from the surgeon to the patient at the time of surgery.

Activities

“So … what WERE you planning to do this week?”

This intraoperative question is a good opening for a dialogue on successful behavior after surgery. One of the main reasons for postoperative complications is that patients do things they should

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not be doing in the first weeks after surgery. This is especially true if the surgery is for a traumatic problem, such as a lacerated tendon or broken bone. Undoubtedly, the patients had prior plans for the week after surgery. For example, playing hockey or building a house after a flexor tendon repair or a K-wired finger fracture is not going to produce a good outcome. The patient is most likely to listen to the surgeon during the surgery about recommended life-plan alterations. The patient is less likely to be open to good advice from their spouse or friends after the surgery.

> "This hand only does 1 thing for the next 2–3 days until you are completely off all pain killers. It stays up higher than your heart whether you are walking around or sitting up at the kitchen table to eat with one hand. If you walk with it dangling down by your side, or if you use it to work, it will bleed inside the wound, swell more, hurt more, and take longer to get better. You are going to need to be a one-handed woman for the next 2–3 days. Do you have any help at home?"

Patients respect their surgeon. If a surgeon tells their patient not to walk around with their hand dangling down, they will be less likely to do that. If we tell them this will increase swelling and bleeding in the wound, which hampers recovery, they will understand it better. I tell them it will also increase the chances of infection, especially if the patient has transcutaneous skin sutures.[1]

If those words are spoken to patients by the surgeon during awake-surgery, most are likely to listen and remember much more than if they are sedated or if they get the same information in a pamphlet that they cannot or may not read. If they get the information verbally from a nurse after sedation, they are less likely to remember it because of the amnestic effects of sedatives.

Pain management strategies

> "What would you normally take for pain if you have something like a headache? Advil? Tylenol?"

If the patient tells me they normally take an over-the-counter, benign pain medication, I tell them:

> "That is all you are going to need after this operation if you follow the simple rules of keeping your hand higher than your heart and keeping it quiet until you are off all pain killers.[2–6] Treat it like a sleeping baby; don't disturb it! You can take a little Advil and/or Tylenol after the freezing (numbing medicine) wears off this evening and maybe again tomorrow if you need it. However, if you keep your hand quiet and higher than your heart, the sting of the cut (break) will be gone by 2–3 days from now and you will get into the pain of 'gee, doctor, now it only hurts when I put my hand down or when I try to use it.' When that happens, you stop taking all pain medicine and listen to your body. We did not spend 2 billion years evolving pain because it is bad for us! It is your body's only way of saying: 'Mary, would you please stop that? I am trying to heal in here and you are screwing it up!!!' That is a little voice in your head you should listen to, and you cannot hear it with Advil or Tylenol in your ears. That is why you quit taking pain medicine after a couple of days and follow 'pain-guided healing.' Just don't do things that hurt! It's also called common sense!!! Don't put your hand down or try to use it until it doesn't hurt anymore to do those things."

Clearly, the advice will be different for the patients who are on chronic pain medication, because they don't know what hurts. I advise those patients to immobilize and elevate longer and decide on a case-by-case basis how to handle them.

Wound hygiene

If I have only done a soft tissue operation that does not need a splint, such as carpal tunnel, trigger finger, lacertus release, or Dupuytren's fasciectomy, I tell them:

> "You can take off the bandage and get in the shower tomorrow or the next day with a naked hand. It's a myth that you can't water fresh wounds.[7] You don't need to rub it with soap, but it's OK if a little soap or shampoo run over it. You are still not using the hand in the shower because you are still keeping it higher than your heart until you are off all pain killers, and you know what hurts! After your shower, you can rewrap your hand with a clean bandage that does not need to be sterile.[8]"

I explain to patients about the bandage (usually just a rolled, clean, gauze bandage with a clean, gauze pad underneath).

> "This bandage does not stop bleeding and does not stop infection. YOU stop bleeding and YOU stop infection by keeping your hand up higher than your heart and keeping it quiet. However, you are normal, and you are human, so you are going to forget to do that. When you forget and go to put your hand down or to use it, you will see the bandage and it will remind you to keep your hand elevated and quiet. You can wear it for 4–5 days until you and those around you are used to the idea that you are following *pain-guided healing*.[9]"

Flexor tendon intraoperative advice

During a flexor tendon repair, the following advice can be very helpful (see the Video):

> "It is most important that this hand stays up and quiet until I see you here with my hand therapist in 4 days. That gives time for the internal bleeding to stop, the swelling to come down, and lets you get off all pain killers so we can start pain-guided movement of up to half a fist the next time I see you. Your hand will be like a report card. If it is swollen like a football, I will know you have been walking around with your hand dangling down by your side. If it comes in looking pretty much like the other hand, I will know you have been keeping it up higher than your heart and quiet for the last 4 days. You saw your hand make a full fist and straighten out all the way today, so you know it will not come apart if you only do up to half a fist of flexion with the therapist. If you move your tendon too much or if you jerk it or use it, the repair will rip apart because a normal tendon is much stronger than a sutured tendon.[10] If you don't move it enough starting in 4 days, it will get stuck in scar. If you rip this tendon repair apart, the chances of us getting a good result is much smaller. If you get stuck in scar, you may need another operation called a tenolysis. You just want to keep your tendon gliding a little, so it does not get stuck. That is why it is so important that you attend all your visits with the hand therapist so she can help you decided what is too much and what is not enough safe movement. If you do everything your therapist and I ask you to do, the chances are good that you can get a good result.[11–12]"

Summary

It is difficult to measure and quantify the outcome improvement effect that arises from good-quality, uninterrupted intraoperative conversation between a patient and their surgeon during surgery. However, this surgeon is convinced that this is 1 of the main improvements in his career, which has led to better results and fewer complications.

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