What Hands Can Do

by Sara Levine

I can't remember the last dog I spayed. It's possible that one of the techs gave her a dose of preansethetic in her cage before I came in, so that when I met her, she was already a little wobbly, her eyes not quite focused. I must have been aware, at least, that she could be the last dog I'd spay for a while because I was planning to try to get pregnant on my next cycle. If successful, I wouldn't do surgery for the duration of my pregnancy because I didn't want to risk exposing my potential child to the inhalant anesthesia that we used.

Let's just say that she's a lab cross, around six months old. Yellow with ears that point up a little before giving way to gravity at the tips and wide brown eyes. It's likely. When I go to her cage, she puts her head down, tucks her tail between her legs, wags her whole rear end in greeting. *I'm submissive and friendly*, she says. *Don't hurt me*. I attach a leash to lead her to the surgery room, but she's a little unsteady from the preansethetic. With legs splayed too far out, head lowered in concentration, she reminds me of a calf or of a child on ice skates for the first time. I put my arms around her and lift—around forty pounds. Her body is warm and heavy against my chest. She still has that sweet, musty puppy smell.

Once the dog is on the table, Michele, the tech I'm working with, holds her while I listen to her heart with my stethoscope and check her color.

"Such a good girl; such a good pup, there you go," Michele says giving her a knuckle rub on top of her head. Michelle's hand is freckled, her nails, pale and manicured.

The dog relaxes into her, resting her head on Michele's shoulder like an over-tired toddler. Some of Michele's hair has fallen over the dog, and I notice her light red shade nearly matches the dog's coat. I draw up the injectable anesthetic. Michele holds off the vein on the dog's right front leg. I feel for it with my thumb. It's hard to see, but feels like a taut worm under the skin. I roll my

Available online at <code>«http://fictionaut.com/stories/sara-levine--3/what-hands-cando»</code>

Copyright $\ensuremath{\textcircled{O}}$ 2008 Sara Levine. All rights reserved.

thumb over it, side to side to learn its location. Then, I line my thumb along its length so it doesn't roll away and insert the needle. I draw back, see red and inject slowly. The dog's head almost immediately drops as though all her muscles have turned to jelly. Michele tries to mold her back into an upright form. She holds the dog's upper jaw with one hand. I catch her tongue with a piece of gauze and pull out and down. Michele positions the over-head surgery light so I can see down the dog's throat. Intubating is a dance, once you have worked with someone for a while. You don't think of the steps and don't have to discuss.

I reach for what I estimate to be the best fitting endotracheal tube from those Michele has previously lined up for me and watch for the vocal folds, those guards of the entrance to the trachea, to open as they must when the dog takes a breath. The tube is long and translucent and has a soft, wrinkled plastic cuff around its middle which can be inflated for a snug fit in the trachea, to prevent air from leaking around its sides. It's reminiscent of a phallus, the cuff, an empty scrotum. I watch as the entrance opens and closes. I'm rigid with concentration, a heron poised at the edge of an inlet, waiting to strike. The dog takes a breath. And then another. I insert the tube, in one smooth motion. A quick and surprising movement: once done, it seems inevitable. I hold my palm at the opening of the tube to feel for warm air when the dog breathes out. I hold my breath as I wait. It comes as a soft blast, and I get goose-bumps on my upper arm. I breathe out.

"Okay, we're in."

Michele secures the tube in place in the dog's throat with a long piece of gauze while I adjust the knobs controlling the amount of oxygen and anesthetic gas that will be delivered. She puts lubricant into the dog's eyes. I inflate the cuff of the endotrachael tube. We pause to watch the dog take a breath. And then another. I check the dog's eyes. They're rolled up into her head. Good. She's going down okay.

I help Michele roll the dog over onto her back and secure her four feet to the sides of the table with four knitted pieces of

stained white rope. Then, she clips the belly and cleans the surgical site, while I scrub up and put on my surgical gown and gloves. The room smells faintly of iodine, and the only sounds are the running water and the soft, rhythmic popping sound that the rubber breathing bag makes as the dog exhales. I turn the water off with my elbow. Michele ties the back of my gown.

"Too tight?" she asks.

"No, that's good."

Before I started doing surgery, I didn't think about how more than one body is involved. We think of the surgeon almost as a machine and the patient as the body being acted on, but in my experience it's more complicated than that. While you may be able to keep your mind distant while doing surgery, your body is involved on an intimate level.

I hold my gloved hands up above my waist as Michele adjusts the level of the table.

"A little higher, I think. And can you tilt it a little more. No, a little less."

Michele gives me a look.

"Okay, I think that's right."

She rolls her eyes and smiles. Crazy doctor.

Michele puts the surgical pack on the tray and opens it carefully with two fingers, peeling each corner of the stained green cloth back like the skin of a fruit without letting any part of her body rise over the top of the tray. It seems like a staged ritual, a Japanese tea ceremony, but one performed in deference to bacterial rather than social convention. The pack contains the instruments, everything I will likely need to complete this operation. I'm conscious of my hands waiting suspended in the air in front of me. I think of what Sabine said when she first learned I was doing surgery: *I can't imagine your hands doing that.* Sabine—my German lover the year we were twenty four. She spent the year in the States, much of that in my arms. She knows what my hands are capable of. I study the dog's belly before I begin. An area has been shaved, perfectly symmetrically as though it was meant to be that way, extending from the edge of her rib cage down to her vulva. The naked skin is mostly pink, but also has irregularly shaped spots of black. A clown dog underneath, previously masked by the more plebeian yellow fur. A little joke by God. A surprise, like when you are undressing a lover and discover a far sexier style of underwear than you'd have expected. You feel protective and appreciative at the same time.

I focus on the umbilicus, the landmark I need to begin the surgery. It's not an indentation as you find in most humans or the obvious bulge of an "outy" belly button. It's subtle, just a slight puckering, as though someone pulled out a bit of loose skin, folded it over and Crazy Glued it into place. It's flanked on each side by a line of tiny nipples.

The first incision is always a leap for me, not exactly of faith, but that is part of it. Perhaps over Sabine's words which I have taken on as my own. Throwing myself over this hurdle of self-perception. *I can't imagine your hands doing that*. But they do, going where they were not necessarily invited or meant to be.

Michele catches my eye to check if it's an okay time to speak.

"So, this is your last surgery, huh, Doc," she says.

"If I get lucky," I say. She knows my plan is to start inseminating on my next cycle. If I get pregnant now, on the first couple of tries, my leave will not coincide with heartworm season, the busiest time of the year.

"Could happen," she says.

I take a breath, watch for three breaths, steady my index finger over the top of the blade, and make the first incision from a little below the umbilicus downward. The words, *a bold incision*, always go through my mind. Those of Dr. Ouellette, my mentor when I first graduated from veterinary school. *Make a bold incision!* He always instructed, over and over, while I was trying to concentrate, often prompting me to ask him to leave the room. He needed to be involved, and if his hands weren't in on the surgery, he substituted his voice.

"Bold, Sara. Make a **bold** incision! Now. Right now; right now."

"Doc, how about you wait out there. I'll bang on the door with my foot if I need you." My incisions never did approach what might be called bold. Confident, yes, but always carefully considered.

Once the first incision is made, the skin falls to each side, only held together by the soft underlying layer of fat. A small line of red rises to the surface. I blot it with a piece of gauze and cut through the fat layer, soft, like butter. Like fat, I suppose I should say. But moving fat. Keep in mind: I'm cutting into something that is alive, a moving target. The whole abdomen rises and falls as the dog breathes. The movement creates waves, and I ride them as I work. When the rhythm changes, I know immediately. I've never understood the point of breathing monitors, how someone could be cutting and not in sync with the body they are working on. I pause, hand and scalpel suspended, while the dog takes a large breath.

"You gonna do it tonight?" Michele asks, head cocked to the side.

I had expected my boss and the technicians I work with to be a little more surprised when they learned of my plans, but they didn't appear fazed. In a small intimate work place, everyone knows everyone else's business, it seems. It's no secret how baby hungry I am, how I gravitate towards the client's children and have to remind myself to greet the canine family members with equal enthusiasm.

"Not unless I ovulate early."

Michele reddens, laughs out loud. She has been intrigued with the whole process of insemination, full of questions about how I plan to "do it." Her shy tentative inquiries evolved into direct questions once she knew that I was willing to discuss it candidly, to share the joyful absurdity of it all.

Once the fat is moved out of the way, you can see the muscular abdominal wall. It has a thin white line down the center

where the muscles of both sides attach called the linea alba. I cut along this line to enter the abdominal cavity; the muscles don't hold stitches well, so it's best to enter and exit along this stronger fibrous terrain. I take hold of the linea with my forceps and tent it upward. With the other hand, I make a stab incision with my blade, sharp edge pointing skyward. If you enter the other way, you risk damaging the fragile organs tucked underneath. I insert the tip of the scissors into the tiny opening I've made and begin the slow and tenuous journey following the line. I think of my kindergarten teacher who admonished me harshly for not being able to cut along the lines she'd drawn. Turns out she was right; it was a skill I'd need.

I know I'm on the right track by the texture I feel through the blades of the scissors. It's like cutting a thin piece of corrugated cardboard; it feels slightly gritty. If you go off track, it will cut too smoothly. You have slipped into unsteady ground.

If you have seen too many movies, you may expect spurting blood as the abdomen is opened, but usually there is none. This is not to say there isn't drama, but it's of the quieter variety. When I gently part the sides of the abdominal wall, I'm struck by how beautiful it is in there: wet and gently rising, but quiet as the moon.

Entering this landscape is like snorkeling for the first time. Above the water, you are aware of the waves and the sea sounds and the proximity of the boat. You expect you might see some fish when you go under, but are in no way prepared for the sensory experience that awaits you. You close your eyes and dip your head under and open them and a new world unfolds: fish of unimagined colors swimming in schools; single fish with inflated lips and fins that seem to wave Dr. Seuss style in incongruous ways; living corals, and sea plants all moving to their own quiet rhythms. It's teeming with activity and life, and it's totally silent. You can't believe it was here all this time, right under the surface.

Each dog's abdomen is unique. The organs are the same, but it always looks different, like a face. You go under and are

surprised. By the exact shade of bluish purple of the bladder. By the thin longitudinal lines decorating the thickened folds of intestine. And by the movement. The movement can be dizzying at first. The rhythm of the breathing raises and lowers the intestines en mass, and at the same time, each visible blood vessel, a flash of red, is quietly pulsing to its more rapid tune.

While surgery may be a little like moon walking and a little like snorkeling in the Caribbean Sea, there is a third experience it is also a little like. It's a little like sex. You are entering the body of another living animal, and it can't help but be an intimate experience. Of course, as in sex, while the actual gestures from one encounter to another are similar, it is the mind that frames the experience. In veterinary school, on our surgery rotation, we gathered around a surgical resident vying for a spot to peer into the chasm in which he was working. When he could not figure out how to do some particular procedure, I forget what it was, finding a particular blood vessel perhaps or tying some knot securely enough, he asked the attending surgeon for help. The surgeon made some hint of a cocky gesture like rolling up his sleeves (which he couldn't really do because he was scrubbed up and sterile) or flipping back his hair (which couldn't move because it was plastered down by his surgical cap), and plunged his hands into the hole. *Sloppy seconds*, he said. No one made eye contact. We all looked at our feet, covered as they were in light green paper booties.

When you're in veterinary school, you think the hardest part of spaying a dog will be finding the uterus. You will have dreams the night before your first spay of being lost there for hours, the dog's tolerance for anesthesia slowly draining away as you extend your futile search. And it is indeed possible to lose your way in there. I remember the day in veterinary school we got to spay our first dog. Some twenty dogs from the shelters in the surrounding towns were all splayed out on their backs on makeshift metal surgery tables, at our mercy. It was mostly quiet in the long narrow room until we reached this moment of the procedure. Then, there were cries from all ends of the room. *Is this it? Is this the uterus? I can't find it.* We held up loops of intestine and sad looking blood vessels drooped from our spay hooks, as the instructor raced around the room to help. The level of panic heightened. *Does it have an ovary at the end of it?* he asked over and over. *If it doesn't have an ovary on it, it can't be a uterus.*

My strategy for finding the uterus, one that took many expeditions into many dogs' abdomens to develop, is as follows. Don't touch the intestines. Don't go anywhere near them. You can get lost in there. Like some deep ocean sea anemone, they may appear to offer shelter in their soft looking folds, but watch out-they'll eat you up. Instead, focus on the bladder. Rock its belly gently to one side, and the uterus will be underneath. It has to be there—there's nowhere else for it to go. It's shaped like the letter Y. The ovaries attach to each upper arm of the Y, but deep in the dog, out of reach and certainly out of sight. The base of the Y becomes the cervix and then the vagina, and as such has to be anchored here in its place. In the prepubescent dog, one who hasn't yet gone into heat, it's narrower than a pencil and milky white, but, in the more mature dog, it may be enlarged, bulging with blood vessels, often looking very much like a piece of intestine. Gently sweep it up with your finger, and then guickly stick a spay hook or a pair of forceps under it to secure it. It's slippery as a fish and will swim away if given the chance.

I lift the bladder, and am able to see a small strip of white, as expected. I dip my index finger deep into the wetness and am able to hook the uterus. I slide a forceps under it and pause to wipe the fat off my fingers with a piece of gauze. I trace it up towards the head with my fingers to find the slight bulge of the ovary at its apex. I am deep in the dog now and cannot see what my hand is doing. Putting pressure on the ovary, I reach beyond it to the ligament which attaches it to the abdominal wall. When taut, it feels like a guitar string among mush. The mush is the blood vessel which services the ovary and fat surrounding it. In order to tie off the blood vessel and remove the ovary, you have to first break this ligament. Without breaking the blood vessels, of course. If you did that, the dog would bleed out very quickly. An experienced surgeon, uterus in hand, will tell you that this is in fact the most difficult part of the spay. Also the most painful.

I put slight pressure on this suspensory ligament, and the dog's breathing becomes more rapid.

"Turn her up a little," I say.

Michele adjusts the knob on the anesthetic machine so that more gas is going into the dog. It's a precarious balance, using anesthetic gas. You need to bring the dog to just the right plane of awareness or unawareness in order to do surgery. Too light, she may feel what you are doing or even try to get up and leave. Too deep, she'll stop breathing and possibly die.

We talk while we wait for the dog to go deeper.

"Did you tell him about his sperm?" Michele asks. She's referring to Monday when I brought in a sperm sample from my friend who agreed to be the donor. Everyone gathered around the microscope to confirm that his cells were single headed and swam straight and true.

"I told him he's quite virile."

Michele grins.

Once sufficient time has passed, I take hold of the ligament again. To break it, I push downward with my thumb while pushing upward with my index finger. This is not an easy bond to break, and I have seen many large men grunt with the effort of the maneuver. The body holds tight to the ovaries and for good reason. From an evolutionary viewpoint, they are the raison d'être of the animal, holding the potential for future generations.

I push down and pull up with all of my strength. When the ligament gives way, I always have the sensation of stumbling backwards, the internal organs following along with it, and then the whole dog, rolling backwards into me, onto the floor with one wet thunk. I'm always a little surprised when this doesn't happen.

The steps necessary to tie off and excise the blood vessel must be performed in a regimented and precise order. Place clamp.

Place clamp. Remove clamp, tie knot. Repeat. Cut. There is no room for error here, no mental space for dreams of babies or ocean waves. The steps require complete focus. One mistake, and the blood vessel might escape unrestrained. It will spurt blood like a garden hose kinked up for too long, splattering your gown, the surgery light, the walls, as it thrashes madly in its accumulating sea of red. Not a place you would want to dive in to perform a search and rescue. For this reason, I check and recheck the knots around the amputated vessel before I release it. When I do, it draws back slowly, deep into the body like a moray eel into its craggy shelter.

I trace the uterus back with my finger to find the other arm of the Y, and repeat the procedure on the left side. The uterus, in view now, looks like an elongated Y a child may have made drawing with Elmer's glue on a piece of construction paper. It's hard to believe this thing could actually shelter and nourish puppies. But it does. They all line up in there, like beans in a pod, head to tail and head to head and every which way, in both branches of the Y and down into its stem. And bean sized, they are not for very long. In this dog, assuming she had mated with a dog of comparable size, they would be the size of baked potatoes by the time they were full term. Her skinny organ would stretch and build itself up to accommodate them all once her hormones brought their messages by to do so. Never underestimate the power of hormones.

Once the second ovary has been excised, the focus becomes the base of the Y shape where the uterus meets the cervix and vagina. The organ becomes thickened at this end, and it's necessary to use a large clamp to crush it down. I use surgeon's knots to prevent slippage. Once two knots are well in place, I cut, and lift the whole excised uterus out of the dog's body with its attached jumble of metal clamps and lay it on the tray. It's already cold.

I take a clean piece of white gauze and trail in through the abdomen, a girl waving her kerchief. It remains white and unstained, so I am assured that my ligatures are holding. If it were to come up red, I'd have to explore the source. To close the abdominal wall, I use nylon suture material. It will likely be there for the life of the dog, but it's strong, so worth it. I close this layer with a pattern called cruciate. A tiny row of crosses holds it together.

Michele turns off the anesthetic gas, leaving the dog only on oxygen; we are almost done. I change to a suture material the body can absorb and close the fat layer and then the skin layer in continuous patterns. Knowing that the only way a dog's owner can judge the skill of a surgeon is by the closure, I place my skin sutures under the surface where they cannot be seen and bury my knot. I cover my tracks. If it were not for the shaven belly, you might not even guess I'd been there.

I hold the uterus with its attached metal instruments over the plastic garbage container, and release the clamps one by one. A slight amount of blood drips, and the uterus falls into the paper towels below without a sound. I wonder briefly, as I sometimes do, if there will be divine retribution, if I will be unable to get pregnant because of how many reproductive organs I have dumped in the trash. I don't really view the world this way, but some ironic and tragic twist of fate, such as you might find in a work of fiction, would not surprise me.

The dog is rolled over onto her side. The endotracheal tube is still in place but she is unconnected from the anesthesia machine. She is breathing more rapidly, but not moving yet. She has to swallow, show conscious movement before it's safe to remove the tube. There is a slight odor of anesthetic gas in the room. Michele is gathering up the surgical instruments and bringing them to the sink. I'm pulling off my latex gloves and removing my gown. We're both watching the dog. But my mind has already started to drift. *How much sperm does the average male human produce at a time? One CC? Four? I'm not sure; I should have looked it up. The one CC syringes will be easier to insert, but will dipping a few times into the jar damage more sperm? The stopper at the tip of the plunger is black rubber, and I know rubber is spermicidal. <i>Will I be decreasing my chances of conceiving if I do it this way?* I remove one from its sterile packaging and try to pry the rubber part off to see if the syringe will still hold water without it. I'm wondering if I really need to take the syringes now. Probably do, given that tomorrow is my day off and I could ovulate as early as Friday. I put two of each size syringe in the back pocket of my scrubs. The dog coughs, and Michele pulls the tube. She looks at me.

"I'm not going to even ask what you are doing," she says.

A year later, and my daughter is nursing, her lanky limbs doing their rhythmic dance. We are both drifting, in the milky haze that comes with breast feeding in the early months. I am doing surgery in my mind, as I do, so as not to forget my skills. I can go through each gesture, mind rehearsing so my hands don't forget. Noticing that she doesn't have my complete attention, my daughter reaches her long arm towards my face, and I direct my focus back to her.

But even despite interruptions, I haven't been able to get there. I don't know whether I will be able to again. I can make it into the abdomen and locate the uterus and trace it up to the swelling of the ovary and begin to strum the suspensory ligament, but that's it. There is something in me that will not let me break that damn ligament, if only in my head. I can remember doing it, but can not imagine my fingers doing it again. What must be closed down in me in order to break another body can no longer be closed down. That particular door was plowed open by my daughter's head on her way out; I am now completely open.

Others have tried and failed to describe the feeling of becoming a mother. I will not even attempt a metaphor here. What has occurred is this: I can no longer imagine cutting another animal off from this experience.

In my mind, I still see rows and rows of dogs waiting, in shelters throughout the country—the too floppy jowls, the overzealous bouncers, the wise dogs with despondent eyes. Though I know most will die unclaimed, my body remains unstirred. I'm grateful there are many skilled and compassionate veterinary surgeons out there working hard to ameliorate this problem. But I am planted firmly here, on this couch, the heaviness of my daughter's pungent, sleeping body anchoring me to this moment. My hands, for now, have other work to do.

~