

WILEY Blackwell

Edited by Geraldine B. Hunt

Pitfalls in Veterinary Surgery



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*University of California at Davis
California, USA*

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Contents

Notes on Contributors *vii*

Acknowledgments *ix*

Preface *xi*

- 1 “Can’t You Do Anything Right?”: The Shocking Realization That I Was Not Perfect 1
- 2 Beastly Bellies 5
- 3 The Friday Night Special: Or Why Do Patients Become Critical Just Before the Weekend? 15
- 4 Between a Rock and a Hard Place: When to Refer and What Do You Do
When Referral Is Not an Option? 27
- 5 Courage, Mystery, and Awe: The Intangibles of Being a Veterinary Doctor 39
Julie M. Meadows
- 6 Placed on Earth to Test Us: The Not-So-Humble Spay 43
Catherine F. Le Bars
- 7 “Oops!”: Not a Good Word to Hear During Surgery 47
- 8 Learning the Hard Way: Student, Resident, Teacher 57
- 9 “But I Don’t Want to Look Stupid ...”: How to Let Others Help You 65
- 10 “It Didn’t Look Like That on Paper!”: When Textbooks Let Us Down 73
- 11 “It Will Be Interesting to See Whether That Works”: How to Be a Creative Surgeon 83
- 12 When the Unthinkable Happens: Mishaps, Mis-steps, and Medical Errors 95
- 13 Things Went South – Now What? 103

14	"There's Got to Be a Morning After": Things Went Wrong – Now Live With It	111
15	One Leg Too Many: Patients Who Lost Limbs	121
16	Reconstruction Rescue: When the Hole Just Keeps Getting Bigger and Bigger	133
17	"Why Is Sam Straining?": Iatrogenic Strictures and Stray Oddities	143
18	"An Alien in My Waiting Room": Everyday Occurrences of the Unexpected and Unbelievable	155
19	Rewind: What Would I Do Differently If I Had the Chance?	167
	Index	171

Notes on Contributors

Geraldine B. Hunt

A child of Sydney's Northern Beaches, Geraldine Hunt graduated from the University of Sydney in 1983 and spent two years in small animal practice before commencing a PhD in cardiac electrophysiology, during which she learned about myocardial activation, open heart surgery, and critical care for thoracic patients. Following completion of the PhD, she worked for another year in small animal practice then moved on to a residency in small animal surgery. Having decided she wanted to become an academic, she took a position as lecturer in veterinary anatomy and, once she became a qualified Fellow of the Australian College of Veterinary Scientists, was also appointed as a visiting specialist to the University of Sydney Veterinary Teaching Hospital.

When a position as senior lecturer in small animal surgery became vacant, she moved full time to the Department of Veterinary Clinical Sciences. From there, she became head of small animal surgery and ultimately director of the Small Animal Teaching Hospital.

As a result of her early training in cardiac and vascular surgery, she developed a strong research interest in congenital cardiovascular diseases of dogs and cats. This developed into a particular focus on congenital portosystemic shunts. In 2008, deciding it was time to experience living and working in another country, she decided to make an even larger move, and left the University of Sydney to become Head of Small Animal Surgery at the University of California, Davis, USA.

Geraldine has been involved in training thousands of veterinary students and many surgical residents. Throughout all stages of her career, she has also maintained an interest in refining the discipline of surgery, and improving treatments for patients in private veterinary practice, and to this end has engaged in continuing education for veterinarians worldwide. This book is a continuation – and an extension – of those efforts.

Catherine F. Le Bars

Fascinated by the animal world from a very young age, Catherine Le Bars obtained her Bachelor of Veterinary Science from the University of Sydney in 1988. She spent her first four years working in mixed and companion animal practices, gaining experience and exposure to a varied client base and case load.

In 1992, she emigrated to the UK and traveled the country as a locum for two years, before settling into a busy Southampton practice. During her time there, she developed her skills in soft tissue surgery across a range of species, including companion animals, pocket pets, reptiles, and birds. Responsible for mentoring the veterinary graduates in the practice, Catherine was keen that they

learned to walk before they ran, especially in the operating theater. This meant mastering the first principles of surgery and applying them to increasingly complicated procedures.

Catherine moved back to Australia in 2012 and established her own veterinary practice on the south coast of New South Wales. She takes pride in her role as a first opinion veterinary surgeon and always strives to achieve the best possible outcome for her patients and clients.

Julie M. Meadows

Julie Meadows graduated from the University of California School of Veterinary Medicine, Davis, in 1988. With great feeling for the human–animal bond she began general practice in California’s Central Valley, where the clientele ranged from wealthy agricultural families and college professors to immigrant workers. At a time when specialty care was hours away and financial resources varied, she learned to appreciate the value of excellent communication with clients and a foundational understanding of her patients’ medical problems in order to shepherd their health and that bond – what has now come to be called relationship-centered care.

Over 20 years in practice, including 10 years as a practice co-owner and two years teaching in a local veterinary technician program, she discovered the joy of sharing her values and experience with students and mentoring employees. With stars in her eyes for her alma mater, in 2008 she accepted a position as a clinical professor at UC Davis to develop its primary care program in response to a North American initiative to redirect veterinary education to entry level skills. There she and other pioneers shepherded the integration of core competencies such as communication and history-taking into the traditional curriculum across all four years of the program. She also built a robust general practice that allowed senior students to receive first presentation cases, including pediatrics and preventive healthcare, without house officers.

Julie returned to her professional roots in 2016, melding her loves of general practice and beaches by becoming lead veterinarian at a small practice in Cairns, Australia. Without the luxuries of having specialists in her building and access to advanced diagnostic capabilities, she has had to “practice what she preached” to students and is busy listening carefully to navigate international accents and new vocabulary. She spends her days with hands on her patients and exchanging knowledge with her new team as they work towards maintaining the human–animal bond in Australia.

Acknowledgments

To my parents, Susan and Michel, who always believed I could fly, and still feel I can soar higher. To my sister, Kate, my touchstone, and the best vet a coastal village could ever wish for. To my husband and partner in everything, George, who has helped me build a stable perch from which to spread my wings. To the many colleagues who supported me through the years, vets, techs, and others, who embraced me into the profession, taught me, challenged me, and boosted my spirits. To my students, the future of our profession, whose expressions of delight when they mastered the Ford interlocking suture made it all worthwhile. To my clients, who entrusted me with the lives of their dear companions. And to all my patients, who gave me so many opportunities to learn, improve, and teach, and who helped pave a smoother road for those to come. Names and some identifying details have been changed to protect patient confidentiality.

Preface

The thought struck me somewhere during the subcutaneous dissection.

I am a surgeon!

Not only a surgeon, but Faculty in one of the world's largest veterinary schools.

My patient was a skinny Rat Terrier called Rocket. Rocket hadn't moved quickly enough just over a week ago though, and found himself launched into low orbit by his neighbor's Prius.

He crash-landed on his stomach, which caused an ugly shearing injury to his groin; a ragged mouth exposing the fang-like shards of his shattered pubis.

Rocket was walking surprisingly well for a dog that had been so manhandled. His owners were maxed out on all their credit cards, so the emergency service opted for open wound management, which was complicated after only a few hours by a soaking flood of straw-colored fluid.

Somewhere in the mess that had once been Rocket's pubis, there was also a large hole in his urinary tract.

After reflecting on my career circumstances, my next thought was:

Why then, if I am such a well-credentialed surgeon, do I have so little idea of what to do next?

My student assistant – who had a keen interest in becoming a surgeon herself – watched intently as I dissected through a discolored mass of fat, edema, and hematoma. Our goal was to explore the caudal abdomen and see how much of Rocket's bladder and urethra was intact and then ...

And then what, exactly?

This was truly exploratory. There had been no money for advanced imaging, so I really didn't know what I was going to find. And it was purely a salvage procedure; the owners could not afford stents or bypass conduits, or delicate reconstructive surgery which might or might not work. Rocket's options were very restricted.

Later, after I had located the transected end of the urethra just caudal to the prostate, brought it through the ventral abdominal wall, and anastomosed it to the caudal fornix of Rocket's prepuce¹ (Figure P.1), the student said, "Wow! I have never seen that before!"

"Neither have I."

She grinned. "Yeah, right."

"No, I'm serious."

She stared at me, mouth slightly open, "But you just ... you went ahead and did it, as if you'd done it a hundred times before. How do you know what to do?"

It was a good question. How *did* I know what to do, and how to do it? It was not as simple as opening a book and following the instructions. In reality, it was a synthesis of my experiences – good and bad – with many patients. Putting my textbook knowledge into a practical context to solve a new problem.

1 Bradley RL. Prepubic urethrostomy: an acceptable urinary diversion technique. *Problems in Veterinary Medicine* 1989; 1: 120–127.



Figure P.1 Prepubic anastomosis of the prostatic urethra to the prepuce (arrow) in a dog following trauma.

I eventually answered, “I have some tricks I learned through the years.”

“Can you teach me?”

Another good question. It took three more years and some careful thinking to answer it, but here goes ...

1

“Can’t You Do Anything Right?”

The Shocking Realization That I Was Not Perfect

My father likes to introduce me as the vet who put the parrot’s leg on backwards.

Having invested so much emotional and financial capital in my education, I am perplexed that my parents should find amusement in this embarrassing moment of my budding veterinary career. Surely they should inform their friends of my years of training, or all the letters following my name, or my position as a professor of surgery. But I am doomed to being defined in my family’s eyes by one small yet highly visible complication (I think there were extenuating circumstances, but you can make up your own mind later).

Having evolved from a childhood dream of palaeontology (which lost its appeal once I realized dinosaurs and humans never cohabited the planet), I cycled through visions of African exploration to becoming a marine scientist, a forensic pathologist and – finally – a jet-setting equine veterinarian (Figure 1.1). Veterinary science would suit me, I decided. I preferred animals to people: people were too focused on themselves, they held silly ideas and misconceptions, and they complained too much. Ironical then, that the first harsh criticism of my career came directly from one of my animal patients.

Mrs. Sofel was a long-term client of the small animal practice that employed me immediately after graduation. She was probably only in her mid-sixties but looked about a hundred to a young veterinarian fresh out of university. Our relationship did not get off to a particularly good start, as she took one look at me when I

entered the consulting room and wanted to know what I had “done with Dr. Davidson.”

“Dr. Davidson is on holiday for 2 weeks,” I replied.

“Well, I suppose you’ll just have to do, then,” she sniffed. She usually came in trailing a Cushingoid Maltese with more warts than teeth, but this time she swung a large birdcage onto the examination table. I realized her frail appearance belied great strength; a conclusion that did little to sooth my new-graduate nerves. The birdcage contained a huge, sulphur-crested cockatoo.

“Oscar has a lump,” said Mrs. Sofel.

For a moment, I was speechless; not because Oscar was a bird, or because his beak resembled a large pair of garden shears, but because he was almost completely bald. I quickly diagnosed him as suffering from beak and feather disease. Actually, it was just about the only disease I could remember from my avian medicine lectures at that particular moment. I stared at Oscar, who stared back; his beady black eye encircled by leathery grey skin. He looked little like a bird, and much more like some form of mutant dinosaur. The effect was complete when he raised the lone yellow feather on the crest of his head, and screeched. I practically hit the ceiling.

“It needs to be removed,” Mrs. Sofel announced.

My heart already pounding, I was further horrified to realize she was talking not about the single head feather which had so captured my attention, but about a large, egg-shaped mass protruding from Oscar’s rump.



Figure 1.1 A young “Dr. Hunt,” quite obviously destined to become a small animal surgeon.

My main comfort at this point was that I had so little experience I did not yet know what to be frightened of. I knew how to anesthetize birds: we had knocked out chickens in a practical class at uni and successfully woken most of them up again. And I’d had a good training in basic surgery, so I had a rough idea of how to remove lumps. I wasn’t quite sure how I was going to get Oscar out the cage in order to do either of the above, but I was sure I could cross that hurdle when I came to it.

“Well, um, yes ... we can do that,” I said.

“When and how much?” These were the days before computerized medical records, appointment systems, or account-keeping programs, so I made a quick escape to the reception desk to find the answers. Thank goodness for Theresa, our wonderful receptionist and long-term backbone of the practice. She gave me the

information I needed (I suspect she would also have been able to tell me what drugs and surgical instruments to use, had I only asked).

Mrs. Sofel and I agreed on a price, and a date when Dr. Davidson was back in clinic, and she swept Oscar’s cage up and turned on her heel. But Oscar was not finished. He craned his neck to look back at me, and the crest feather slowly elevated again. I braced myself for the parting screech, but instead Oscar said in his parrot’s voice (closely resembling that of an old woman), “*Can’t you do anything right?*”

I stared at Mrs. Sofel, who said nothing. I had the uncanny sense that Oscar and his owner had formed a telepathic bond. Mrs. Sofel sniffed again and sailed from the waiting room, leaving me struggling for words. I suspect that particular phrase was heard frequently by those in her company, and never received a satisfactory answer.

Whatever the explanation, Oscar’s question proved sadly prophetic when we masked him down two weeks later, and he promptly died. In retrospect, we should have asked Theresa to do it. She later told me that parrots “always died” when anesthetized and left me wondering how many times Dr. Davidson had proven that particular theory.

Needless to say, Mrs. Sofel blamed me for Oscar’s death simply by virtue of my proximity to the saintly Dr. Davidson on the fateful day, and refused to allow me near any of her “*other pets ever again.*” Although such banishment was a blow to my ego, it was not an entirely unwelcome outcome, all things considered.

After incubation in primary school, hatching from high school, and being “fledged” at university, I had spent 18 years in the educational nest, so to speak. Surely that rendered me capable of doing a lot of things “right,” contrary to Oscar’s observation? Having finally launched into my career with the tenuous belief I would become airborne, I quickly realized I had not flown from the nest so much as staggered out of it, and been fortunate enough to bounce when I hit the ground.

I am sure I was a great success at many things in my early days as a veterinarian. But for some

reason the comfort of our successes fades quickly, while our failures remain to irritate us, as surely as Oscar's diseased feathers had irritated him. At least Oscar was able to pull his feathers out. Looking back on all those mystery patients, unfathomable clients, the questions for which the textbooks provided no answer, all those mistakes I made, and all the things I had to learn the hard way, I do wonder how different my years of practice might have been if I had the knowledge then that I have now.

If only I had known!

We acquire knowledge in many different ways. We have different learning styles. We memorize things by rote, but we truly learn them when we have the chance to apply them. Our profession is a fluid mix of thinking and "doing"; very much dependent on the type of case and its unique circumstances. Some patients fit the textbook description perfectly, whereas others break all the rules. Clients have particular needs and restrictions when managing their pets, and there is always the issue of finance. Sometimes, I suspected the tides or phase of the moon dictated whether things went according to plan. Were the stars aligned? Did I wear my lucky socks to work that morning? Faced with such a complex system, there is only so much our university professors and textbooks can teach us.

Our successes involve a large portion of "seat of our pants" intuition and good luck. Scientific and evidence-based as our profession has become, we will always have to learn some things by trial and error, by simply seeing what works and what does not. Textbooks give us a definitive description, a clear way to proceed with diagnosis and treatment, and a neat explanation for cause and effect. We try to make cases fit the textbook description, or vice versa, and mentally file away inconvenient pieces of information that don't fit in the hope that the abnormalities will either go away on their own or make sense once the patient gets better, or maybe when we've got more experience. What textbooks usually don't show us, though, is the process their authors went through to evolve

the crisp conclusions they share in print. They tell us about the sum total of their experience, and tend not to dwell on the cases that broke the rules.

Speaking to a group of general practitioners in rural Australia some years ago, I shared the story of a truly perplexing case. This case had no fairy tale ending, we made many mis-steps along the way, and the ultimate answer was only revealed in the postmortem room. Standing beside me in the lunchtime coffee line, one of the older vets said:

"I liked your lecture. It gave me a lot of hope."

"That's good to hear. And why was that?"

"I realized you specialists don't have all the answers, either."

I have heard this many times since; from students, junior academics and vets in practice. There is an impression that after a certain level of training, when you achieve fellowship or diplomate status, somehow you know all there is to know, and you never screw up.

It is comforting to the people reading the textbooks, and listening to the lectures, that they aren't the only ones who scratch their heads, find test results that defy explanation, draw the wrong conclusion, agonize over their treatment plan, or struggle for ideas when their plans don't work.

When I ask my colleagues in specialty practice whether they have made mistakes, most of them are quick to say, "Hell, yes!" or "My oath!" (depending on which side of the Pacific they come from). But that is not always the impression we give when we deliver our lectures or write our textbook chapters. We talk about our successes, show the best photographs, sanitize our complications, and generally present a stylized version of what can be a slow, frustrating, confusing, and sometimes downright messy process.

Unpalatable as it is to admit, our cases don't always go well. Most of us are happy to learn from someone else's mistakes, but it is particularly intimidating to confront your own mistakes honestly. Gruelling as it can be, through

my years as an academic and a teacher of veterinarians, I have reaped an ironic reward from sharing my low moments with others and thus allowing them to learn.

Of course, being a veterinarian is not just about the animals. In a perfect world, desperate clients would bring an ailing pet to us and take a healthy one home again after showering us with gratitude and admiration, and full payment of their bill. Reality, however, is not quite so Disneyesque. My experience with Mrs. Sofel was more than simply a lesson in how easily I could fall foul of others. In Mrs. Sofel, I had my first encounter with the client whose sole aim seemed to be to make my life miserable. These clients rarely had a kind word to say, and were capable of finding fault in the most benign of circumstances (Oscar's death aside, which was understandably devastating for everyone). I wondered what it was about me that caused some people to be so very difficult, and I wanted so very badly to defend myself. Couldn't they see that I was trying my best to help them and their pets? Where was the gratitude? The admiration? How dare they tell me how to treat their pet after I spent five years in veterinary school?

I stormed into the treatment room one day after being lectured on how to clip a Yorkshire Terrier's nails.

"Looks like that appointment went well," my nurse, Karen, commented wryly as I hurled the nail scissors into the sink.

"That woman is such a ...," I bit my lip. My suspicions about the human race were being confirmed, but my plan of avoiding interpersonal conflict by becoming a veterinarian was rapidly unraveling. "What did I do to deserve that?"

Karen said nothing, merely tapped a photocopied page stuck to the wall above the telephone. It was titled, "Why It Is Not About You." One of the practice partners posted it after attending a management course. The gist was that when people become aggressive, it is more often about their personality, or what is happening in their lives, than a personal attack on you.

It recommended taking time out to think about things from the other person's perspective, and suggested some explanations:

- 1) In pain
- 2) Fearful
- 3) Stressed
- 4) Grieving
- 5) Financial trouble
- 6) Mental illness.

When we had a difficult interaction, we would take refuge in the back room and try to work out which explanation might best fit that person. It was a great way to defuse the angst, refocus ourselves on the patient and what it needed, and alleviate the often overwhelming desire to march back out and tell our clients why they were being so totally unfair. In the years before "doctoring" and "client management" courses in vet school, these client hostilities took me by complete surprise, and this simple printout was my first introduction to the complex and fascinating science of human behavior.

Naturally, we had some clients who did not seem to fit any of the categories on the printout, and thus someone had penciled at the bottom:

- 7) Just plain mean
- 8) Absolute nutter.

As time went on, I discovered that this was only one small piece of a far more complex puzzle, and as my career took me deeper into the specialty of small animal surgery, with its milieu of emotion-charged circumstances and highly invested clients, I would face gradually escalating surgical challenges, accompanied by rich opportunities for honing my people skills.

In the following chapters I share my experiences about the "pitfalls" of small animal surgery: the things I learned the hard way, the cases that still haunt me, the clients I worked hard to "unpuzzle," and some bright successes when things went exceptionally well. And mine is not an experience confined to the ivory towers of the university, as you will hear from others who have contributed their own stories and insights to this book.

2

Beastly Bellies

Sunday nights were some of our busiest at the regional practice in which I worked for my first two years. We were the only show in town for after-hours coverage once everyone else knocked off for the weekend and switched their phones to the answering machine.

There were many dog fanciers around the Canberra area, and during show season the required chemistry often failed to develop during a romantic weekend and the stud male did not breed the visiting bitch. This prompted a frantic call for emergency insemination before the bitch was driven home again. I had a rough idea of how to collect semen and perform artificial insemination, so Sunday night often found me crouched beneath a perplexed Maltese or Weimaraner dog, feverishly trying to press the right buttons. A quick glance at the resultant sample under the microscope to check for motility, and the accompanying bitch was inseminated by means of a syringe and urinary catheter. Amazingly, some of these emergency “matings” resulted in live puppies.

The unforeseen consequence of these reproductive rescues was that our practice became known as the “go to” place for artificial insemination, and we started attracting non-emergency cases.

Mr. Fortescue, from Brindabella Kennels, brought his Bichon Frise couple to us because he didn’t like to see them “doing that nasty stuff.” Mrs. Grande marched in her German Shepherd, Pinetree Macho III, for semen collection because he just wasn’t interested in her stud bitches.

We stumbled fortuitously on a solution for Macho’s ennui the day we had Fortescue and Grande dogs in the practice at the same time and Macho concluded that Brindabella Perfect Muffin was his ideal Playboy centerfold. We scrambled to prevent some spontaneous “nastiness” from occurring in the middle of the treatment room, but it made our job of collecting from the German Shepherd a whole lot easier. Each time Macho came in for semen collection from then on, we endeavored to produce a small white fluffy “teaser,” and it never failed to get his juices flowing. Despite being occasionally fruitful, and spawning ageless practice jokes, these cases did not impregnate me with the desire to become a theriogenologist, hence you are not reading memoirs of my career in reproduction. They did, however, teach me that sometimes you just have to give things a shot and you will occasionally surprise yourself.

An owner recently said one of the things he really appreciated about his vet was that they were at least prepared to “try.” The trick is to know your limitations, and have a good feeling for the potential consequences. For the great proportion of pets whose owners will never be able to spend the time or money on referral to a specialist center, this is equally important whether you are a boarded surgeon or a general veterinarian in a one-person rural mixed practice. Working out which cases you should keep in your practice, which ones you should refer, and which cases are appropriate for surgery at all takes experience and self-reflection, as you will see in the following chapters.