Canadian Anesthesiologists' Society Presidential Interviews
Dr. Andrew Davies, interviewed by Archives & Artifacts Committee Chair Dr. Mike Wong
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Mike
Today I have the pleasure of speaking with Dr. Andrew Davies, who served as president of the Canadian Anesthesiologists' Society from 1992 until 1993. He practiced for many years in North Bay, Ontario and, in addition to the CAS, he has been involved in the Royal College of Physicians and Surgeons of Canada, and the Ontario Medical Association.

Welcome, Dr. Davies, and thanks for joining us.

Andy
Thank you.

Mike
Let's start from the beginning. Can you describe your family background and childhood?

Andy
Yes, sure. I grew up in Toronto. My father was a general surgeon. My mother was a teacher and later a guidance counselor. I had two younger brothers. It was a very pleasant childhood and we had good support from our parents. That was very useful.

I went to high school in Toronto and then University of Toronto, [which had] just started a new program in Biology and Medicine. It was a four-year honours science program and got you into second year medicine if you passed well enough all the years, which a few of us did. I enjoyed that [program], especially because it was a much more scientific theory-based course [of study]. The pre-med students got the Krebs cycle on a handout and had to memorize it; we had lectures where a professor explained each experiment, they did to devise the Krebs cycle. For me, it was much more interesting than the regular premed [learning].

I always liked chemistry and biochemistry. I almost went into a PhD program in Biochemistry but eventually I decided to go into medicine.

Mike
Given your parental background, did you have any specific family influence to [pursue medicine]?

Andy
I didn't feel any pressure, no. I was always interested. I'd read my father's medical journals and stuff when I was a kid. I was sort of always interested in it. I did have [other] summer jobs. I worked in a brokerage firm, a lawyer's office, and I worked in the arcade at the Exhibition one summer [Laughs]. I had a good experience of other options, and I still liked the idea of medicine, helping people, so that was sort of the final decision really.

I [also worked] summers in biochemistry with Dr. Murray Fraser at the Ontario Cancer Institute. He was working on a transfer RNA and the whole translation of DNA was a hot topic then. So, that was very interesting too.

Mike
After your bachelor's you continued on with the MD program at the University of Toronto, and the "straight internship" in Surgery at Toronto General Hospital.

Andy
Although it was called a straight internship it actually included other rotations in obstetrics, medicine, etc. When I was in fourth year medical school, I thought that I wanted to be an orthopedic surgeon. It was a period when internal fixation of fractures was really expanding. There was a lot of controversy about the best way of doing these things. When I got into my internship, for the first two months, I was doing orthopedics. They were short on assistant residents, so I basically worked as an assistant resident the first two months in orthopedics – and I realized that I liked the theory of looking at X-rays and deciding how to fix fractures, more than the actual doing of it! Then, I really didn't know what I wanted to do, so I ended up doing general practice for three years in North Bay.

When I'd applied [to work in North Bay], they had a general practice anesthesia group at that time, and they needed somebody. So, the last six months of my residency I worked with Dr. David Sinclair, who actually grew up in North Bay and was the chief resident in anesthesia. He filled me in on the basics [of anesthesia]. [During] my last four months [of internship, which] was on general surgery, the chief resident there was kind enough to let me do anesthesia during the day while I covered [the surgery floor] at night. I got a good experience with David Sinclair, who would keep asking me, "If this happened, what would you do?" I had an accelerated training in anesthesia.

During my fourth year in medicine I'd [also] had a two-week anesthesia rotation and I realized that I enjoyed it. I was happy when I came home.

I was happy to go down to North Bay and do both general practice and anesthesia. Then, while I was in general practice, I realized that I enjoyed my mornings in anesthesia more than my afternoons in the office, and I wanted to get more theory [in anesthesia]. I [did get] lots of practical experience [in anesthesia].

Queens, in Kingston, had just set up a new academic teaching program in anesthesia, and I decided to go there. I did get some kickback from my father who thought I should go to Toronto and get more practical experience, but I thought I'd had enough of that. It was more the theory that I wanted. I had a good experience at Queens [completing the residency program and obtaining Royal College fellowship in 1977] .

Mike
Just to take a step back there, North Bay, for those not acquainted with the geography, is about four hours north of Toronto, on Lake Nipissing, in the vicinity of Sudbury.

How did you come to set up your practice there initially? Did you have family there or other contacts?

Andy
Other contacts, yes. When I decided to do general practice during my internship, we looked around Ontario. I took a week holiday and actually drove around. We wanted a smaller place. My wife grew up in Peterborough, which is about 50,000 [people] – at least it was at that time – and we liked that size of [Peterborough]. We drove around Ontario, looked at the phone book and saw how many doctors [communities] had. Dr. David Ochterlony who was in high school with me – a few years ahead – he was with a group in North Bay. So, that's how we found North Bay. It's on two lakes and has all sorts of outdoor activities. It was about the size we were looking for. I ended up joining the general practice there.

Mike
And who were some important figures who influenced you early on?

Andy
Well, David Sinclair was really the most important person, in training me and giving me the proper way of going about anesthesia.

I also did at least a month in the respiratory failure unit at Toronto General Hospital. Dr. Arthur Scott was the director of that unit. He was an anesthetist as well. He ended up becoming chairman of his department for 10 years. He'd been in general practice too before he came back to do anesthesia. He was a real role model for me. I always enjoyed the ICU work and it was part of my practice in the North Bay. Nearly all the non-cardiac ICU's, at least in Canada, were actually started by anesthesiologists originally. It was only later that surgeons and internists became more active, [when they introduced] subspecialty ICU fellowships.

Mike
[The ICU practice] definitely dovetails well into the anesthesia skill set.

How did you come to be involved in the Canadian Anesthesiologist's Society?

Andy
I originally became involved in the Ontario society [Ontario Medical Association]. At that point, there were hardly any people involved who weren't academic anesthesiologists, and so I felt that the people in the community really weren't having much of a voice.

There was one issue about obstetrical anesthesia and epidurals. The people in the academic centers were making noises about setting up rules that really were not going to be doable in the community. My wife and I sent around letters and did a survey of all the hospitals that did obstetrics in Ontario, [about] what their policies were and what they did for epidural coverage.

We found it was all over the map! There were small places with people who were interested, that provided epidurals. There were big hospitals with lots of anesthesiologists that didn't provide the service. The basic take-away was that you couldn't, at that point, make hard and fast rules. It would have really disrupted the provision of the service, which I thought personally was important at that time.

So, then, I got onto the board of the Ontario [Medical Association] anesthesia section and that put me on the Council of the CAS. As a resident in Kingston, I'd been the first resident to be an observer at [a CAS] Council meeting, when they had the annual meeting. I remember I gave an impassioned plea to the people to support general practice anesthesia people in the community, who were really sort of viewed as competitors by the specialists at that point. I think that [perception] changed over the years, but I don't think I got a really positive response that at Council meeting. Being at that meeting made me aware of what the Council did.

When I was appointed to the Council, there were financial issues; they hadn't really the right policies in place. The financial situation wasn't good for a few years, and I was interested in getting that sorted out. When they appointed me to the executive from Ontario, I was pretty naïve and didn't even realize that at that time that there was a progression. Once you were on the executive, you were bound to be president in four or five years. I didn't even realize that was the way it worked, so I really didn't have any great ambition to be president. But I found myself in the situation that that was going to happen.

By the time I became President, the financial situation was settled, and we had a new executive director. Policies were much more objective and in place… so, the issue that had really galvanized me at the beginning was pretty well taken care of by the time I got to be President! I really just sort of felt that it was more of a caretaker year.

Mike
Were there any new challenges or issues that popped up during your term?

Andy
Not that I can remember, no major issues. There were a few situations that were in the newspapers, I was interviewed a couple of times. But there was no major all-encompassing sort of problem. I managed to escape that kind of situation.

Mike
Were there any particular things that were particularly memorable to you, or that you were quite proud of during that year?

Andy
I can't really say, no! I didn't really have the ambition, and it was really not a big part of my career and self-image. But the [most important] thing to me that the CAS did, personally, was the Guidelines for the Practice of Anesthesia. You know, the monitoring requirements and all that. It made it much easier for me to go to the hospital board in North Bay and say look, we need this: new gas machines, new monitoring setups. [To have] in writing the fact that these were required for the safe practice in anesthesia.

The guidelines were always an important part of what the CAS did [in practice].

Mike
Can you speak a bit more around general practice anesthesia, or how the perception of family practice anesthesia changed really during your time?

Andy
It was really totally unregulated at that time. The people in general practice anesthesia had all sorts of different backgrounds, with more or less training in anesthesia. There were people who were tremendous and kept up to date, and there were people who were frankly dangerous. There was no real way of ensuring the training, the baseline abilities. That was really a lot of why I thought that the CAS could step in, especially. There was a need in the smaller communities for that [stream of anesthesia provider]. Not only the anesthesia, but the airway abilities to be available. [CAS] really were, at that point, not interested in engaging with the training [of family practice anesthetists]. I think they felt that that would reduce the chances for fellowship anesthesia people [Royal College-certified] to have jobs and work. But it really wasn't a problem. Over the years, the training of family practice anesthesia has been tremendous, and I think it's really improved the ability of smaller communities to have the emergency ICU airway skills available, and also allow people to have surgery near their homes.

Mike
In your time, where did [family practice anesthetists] tend to do their training, and what was the certification process like?

Andy
There wasn't one. You just did anesthesia [informally, during internship or afterward]. Theoretically, you didn't need any special training. Nearly everyone had done a few months, six months or a year here and there, but it was just finding someplace that would take you either at the end of your internship or as part of your internship. You know, everybody had a general license, so if the hospital gave you privileges you could do anesthesia!

It really was not an ideal situation. It was really quite amazing how well most people were able to function. They were interested, I think, and when they were doing their training, [they were focused on] learning what they needed to learn during the time constraint.

I remember Dave Sinclair would say, "Well, if this happened, what would you do?" I really thought, "Well, next year that could happen, I would have to do it!" I really was motivated to learn all the emergency [management].

Mike
After your time as CAS president, you continued practice at North Bay. How did things change [during your career]? You retired in 2015?

Andy
The end of 2014. Even before the '90s when I started practicing, you had a blood pressure cuff, that was the monitoring – and a finger on the pulse if you were obsessive. Even in Kingston at the Hôtel Dieu Hospital, which was almost like a community hospital. We were the first cadre of residents to go there for quite a few years. They had one ECG set up for [all of the] operating room theatres, which were probably five or six [in total]. And it was a great big cathode ray tube monitor up on a great big stand, that you pushed through the hallway to get to your room, if you thought you needed to use it. Everybody looked down on you when you went through the hallway, in that they thought you were some sort of chicken! That was really the monitoring.

The anesthetic gas machines had no alarms at all or any kind of backup. I, myself, a couple of times, turned on 100% nitrous by mistake at the beginning when I was trying to turn on oxygen. Luckily, I realized quickly the mistake and there was no harm done, but even the simple things like the gear chain that turned on oxygen when you turned on nitrous was not available. The machines weren't even connected to the electricity, they were basically just mechanical gadgets.

We induced with pancuronium, halothane, methoxyflurane, nitrous [oxide], curare, succinylcholine. All of your intubations were done with succinylcholine, with the rare risks that that involved. There was no way of monitoring your muscle relaxant if you used [a neuromuscular blocker]. You just sort of went by the usual doses, and [sometimes] there were people who were floppy and flailing around in recovery – not infrequently!

The things that were important were the monitoring and the safety features. One thing that I gave talks about was monitoring with a muscle stimulator – the four-twitch thing – where you didn't need to have a real muscle power transducer [set-up]. That made muscle relaxation much more scientific, so you could actually give [an appropriate] dose for the patient. That saved a lot of postoperative issues.

The other major [advance] was pulse oximetry. The first time that the salesman was showing us a pulse oximeter, they were talking about it as something that you'd get one [unit] for the respiratory function lab. When I saw what it did, the thought just went through my mind immediately that we needed one of these in every operating room! [At the time], they cost $10,000 and the box was about the size of a tape box, 10" x 4" x 8". Within a few years, [common use in ORs] actually came about.

That was one of the things where the guidelines really helped. It was a big expense for the hospitals, as were the new gas machines with the safety features. Those were the two major purchases that the hospitals had to make to commit to anesthesia. The guidelines made it a lot easier to push [hospitals] to make those investments.

Mike
And in what ways did your practice in the ICU change?

Andy
One of my colleagues [Dr. Ian Fettes] came and joined me after the first six months that I was in North Bay. I was on call basically 24 hours a day, seven days a week for the ICU. Nobody had really been ventilated in North Bay prior to that time. We introduced ventilation and central pressure monitoring. For quite a few years, pulmonary artery pressure monitoring was thought to be very useful, so we got that equipment. For years, I spent time and effort putting [pulmonary artery catheters] in, and eventually it was kind of a dead end. When they finally did studies, it didn't really improve survival, but certainly theoretically it made sense to monitor the filling pressures of the heart and the cardiac output. So, we did it for years until [then]. We were actually quite relieved when the study showed we didn't have to do it anymore, but that was an interesting thing.

Eventually the internists in North Bay got interested in being more a part of the ICU. There was a mixed cardiac and respiratory ICU all the way through, so they'd always looked after the cardiac patients but eventually they took over the non-cardiac patients who weren't ventilated. Ian and I, and the anesthetists who came, continued to look after the ventilated patients. We thought it was better not to have split responsibilities, so we wrote all the orders on the ventilated patients and the internists were consulted as needed.

As time went on with the fellowship in ICU, the new anesthetists who came felt much less confident working in ICU than we did. When Ian and I retired, they went back to the model of just looking after the ventilator and the internists now look after all the other issues in the ICU.

Mike
I should also ask, what is the scope of practice like at North Bay, for those unfamiliar with the area?

Andy
They have all the medical services, [like] dialysis. They don't have any specific specialist cardiology services, but over the years we had excellent surgeons who did chest and vascular. We had an interesting practice. The last few years, that's [all] been regionalized to Sudbury. That was an interesting part of our practice that went away in the last few years.

We did obstetric anesthesia and epidural anesthesia for quite a few years. There was a hiatus when we had a couple of people who really didn't want to do epidurals at all and so we couldn't offer them 24 hours a day. We still tried to do them when that was possible. When those people moved on, for the last 15 or 20 years, it's been a continuous service as well.

That was kind of an issue too, because with protocols for epidural anesthesia in [community practice], part of the reason why we quit for a while was that academic obstetrical anesthesia had put in protocols that really couldn't be done in the community. You know, that you had to be on site the whole time, even if you had an infusion going that the nurses could check the levels of and all that. That was a problem for a few years, too. It got straightened out eventually, but that was after I had been president.

Mike
When you first started at North Bay, with setting up an obstetric anesthesia service there, what were the protocols like? What would the management of a patient with an epidural look like?

Andy
Originally, for the first couple of years, you couldn't guarantee the epidural. But, if you could go and put it in, you would. We tended to use a fairly big dose of local [as a first bolus dose] and then we would have to come back and top it up every two or three hours [by hand]. It was work intensive. Then, we devised this infusion using the fine bore little gadgets that you used for arterial lines [capillary infusion device]. [They delivered 3 mL per hour] for the arterial lines. One day, I was looking, and we had a batch of them that [gave 6 mL per hour]. I realized that these could be used for epidural infusions with a quarter percent Marcaine. They had a little toggle that you could pull to flush the arterial lines, so we just cut it off so you couldn't get a faster infusion and set it up with a pressure pump and a 250 cc bag that was diluted Marcaine. We actually wrote a paper about that (Davies and Fettes, 1981) and it worked pretty well! It gradually wore off in most patients, but it meant that you only had to come back and top up every four or six or eight hours.

It worked well for quite a few years before we got infusion pumps that were safe. The infusion pumps at that time were basically research tools and they were really not very effective, unless you had somebody watching them all the time.

Mike
Right! Now, how has life been after retirement for you?

Andy
Oh, it's been fine. Ian Fettes and I both retired at the same time. For the last five years, we worked one month on, one month off. It worked out really well. When we started the one month off period, we really were twitchy, and we didn't know what to do with ourselves. By the end of the five years, we enjoyed the month off more than the month working. I think it would have been terrible to just go cold turkey and stop [working], you know? We'd always both enjoyed our practice and the kind of things we'd done. We were always busy all the time, basically. We both did our call, right up until the last few months of our practice. It was busy. Getting a taste of retirement was very useful and made the whole thing go much smoother.

We both had interests. We both liked the outdoors, skiing, working out, and jogging. So, it's been good!

Mike
That's terrific. Finally, do you have any advice for the next generation of anesthesiologists?

Andy
I don't really!

The way things have gone have been really positive for anesthesia over the years. It was true [as well] when I was thinking about going back to do anesthesia [residency]. To my mind, the residents in anesthesia were treated much better and more like colleagues than any of the other surgical or even medical specialties. I think that's continued. The people I've talked to still feel that it's a good training program.

The lifestyle [in anesthesia], to me, was always good. You worked hard and you had stressful times, but [there were] interesting things to do and you had time off, which was the opposite of [how] a lot of the surgical specialties are. Especially in the smaller communities.

Mike
Thank you again for speaking today and doing this interview. This will be a very important contribution for the CAS archives. We appreciate your time. Have a good day!

Andy
Okay, you too. Nice talking to you.