A worthy experience for a Chiropractor

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It was forty years ago, this September, that I was appointed to the Canadian Memorial Chiropractic College (CMCC) faculty to teach 2 second year courses in pathology, by the Dean of CMCC, A.E. Homewood. The textbook used was Boyd's Textbook of Pathology, a later edition of what was used when I was a student, 1945–49. At that time, Dr. Homewood was a strong advocate for quality teaching and scientific upgrading for all courses of study. Although he was devoted to the teachings of D.D. Palmer he was a realist and wanted the basic science courses taught according to knowledge of the day.

During my teenage year (17), I was employed by the Connaught Laboratories, University of Toronto as a laboratory technician in adrenaline and adrenal cortical extract assay testing. We used the latest in biochemical assessment strategies for that time. I was under the direct supervision of Dr. George McVicar (PhD) and indirectly, under the directorship of Dr. C. H. Best, a co-discover of insulin. It was through the tutorship of Dr. McVicar that I learned the basic principles of scientific research, and even given an opportunity to practice his teachings using real research hypotheses, to experience research outcomes. In addition, he had me read the biographies of Louis Pasteur, Robert Koch, William Harvey, and others forgotten. Whether you agree or disagree with the discipline avowed by such proven researchers, the lessons learned from their experiences is invaluable to the serious student. After wartime RCAF service, I enrolled at the CMCC. The education received at that time was above average for a chiropractic college and for which I have never been ashamed or embarrassed.

I spent the summer of 1957 reading pathology and included in my study a new pathology textbook published by Saunders named Robbins Textbook of Pathology. The Saunders representative, anxious to have our textbook business, provided a copy for my personal use. It wasn't long before I relied on Robbins for details of the clinical application of pathology, to make the course more meaningful for students. In hindsight, I believe my first year of teaching was average, but not at the level I believed future clinicians required for chiropractic practice. It must be remembered that there was heavy emphasis, in all chiropractic colleges, for the principles and philosophy of chiropractic, which took precedence over the more sober findings of science. Fortunately, medical education was a victim of medical dogma as well, which I believe provided some safety time for chiropractic education in the 1940's and 1950's.

At the end of my first year teaching pathology, I had

grave doubts that I should continue with the kind of "book learning" I was exposing my students to. It was the "blind leading the blind" only a day ahead. Preparation, of decent lectures became an obsession, which took more and more of my family time. I took my problem to Dr. Homewood and suggested, since he was acquainted with the Chairman of the Department of Pathology at the University of Toronto, could he arrange for me to witness post mortems (PM's) at the Banting Institute. To make a long story short, I was given permission to witness, but not participate in PM's, if I made prior arrangement with the Technician in charge of the service. His name was Mr. Bishop, an Englishman about age 55, with a lifetime of experience in London, England., he and I became very good friends. It was now October 1958.

Mr. Bishop would call me when PM's were scheduled, and if at all possible I would attend. It should be known, that the Banting Institute Post Mortem service was primarily for the Toronto General Hospital and residents in a variety of medical specialties required to do 6 to 12 months in this training before moving on. Would-be pathologists spend a minimum of 12 months. in training. Performing a PM was only the gross examination of the body, which also required that all vital organs be examined microscopically. Every PM was then subjected to a conference with all residents present and the Head of the PM service leading the discussion on the gross and microscopic findings. How exhilarating it was for me to witness this exchange of findings and the humble manner in which the residents expanded their knowledge base.

It was fortunate, that my first PM, was with the Head of the PM service, Professor H. Barry. He was trained in England, had a remarkable civilian career in Pathology and an equally remarkable wartime service as well. He was, also the Chief Pathologist for the Royal Canadian Air Force (RCAF) at the time, which provided a unique identity for me. I learned from the very beginning from him that 10% of the PM's could not find a major cause of death, and it was rare to have a single cause of death. He emphasized that the Banting always listed 10 causes of death in order of importance. Even to this day, very few clinicians think that way. To be accepted by Professor Barry was to be accepted by all, and I was invited by him 'to get my hands bloody'

The residents came and went, but I got to know all and surprisingly, I was received warmly by most. I avoided, completely, any attempt to 'educate' them on the basics of chiropractic, until I was invited to give a lecture to the entire PM service on chiropractic. This is 1959, and the profession has not moved very far into the scientific world. Needless to say I was terrified, and spent several sleepless nights formulating a quality presentation. I decided to focus on biomechanics, pathomechanics, neurophysiology, of the IVF and facets, and the single most important clinical condition treated by chiropractors – pain syndromes. Of course, I prefaced my presentation with a short history of chiropractic origins, and admitted that over claim was part of that history. Fortunately, I had the Fred Illi research to support my presentation and a few (very few) journal papers to add credence to my presentation. I left a few chiropractic textbooks for their library.

Following my presentation, I was asked many difficult questions not only from the residents but also from a neuropathologist, who questioned why our students needed to view neuropathology slides when medical students were exempt at that time. Several residents wanted to know how they could work with chiropractors in clinical referrals. A few completely rejected all chiropractic claims, because chiropractic theory was based on a false premise. The Head, Dr. Barry was a most gracious host and thanked me for doing what he called an 'impossible task.' He hoped that I would continue to attend PM's for as long as I wanted. Surprisingly, after my presentation, one resident thanked me and said that as a high school student a chiropractor had remedied a very painful football injury and he was please to finally know why he recovered under a chiropractor's care. In retrospect, well-mannered people treated me in a gentlemanly way. I never felt that I made a great presentation. Quite frankly, the knowledge base for chiropractic science was so thin, at that time that even a mediocre medical clinician could see through my arguments. Years later, before medical students at the University of Toronto and in Oregon before residents at a Portland Hospital, I was able to make a more substantial argument for chiropractic clinical practice, but then this was the 1970–80's.

However, there were winners and they were the pathology students at CMCC, who for the first time received meaningful pathological lectures and how to use that discipline to understand disease mechanisms. Soon I became known as 'Irreversible Vear', because I dared to challenge the wisdom of the body recovering in most conditions,

through spinal manipulation. I taught students what a malignancy and metastases really are, atherosclerosis of major arteries and how they would snap like a twig when bent, emphysema, nephrosclerosis, occluded coronary vessels, etc, etc. ad infinitum. I was given permission to take human organs used at conferences to develop a Pathological Museum at CMCC. In some small way I accomplished that task, and for a few years, students could observe what a diseased organ looked like. When I left CMCC, I have no idea what happened to those museum pieces, other than they do not exist at present.

The major outcome, for me, was to respect the scientific ethic and promote responsible chiropractic practice. In time this lead me into scope and standards of practice, which became my final contribution to chiropractic education. I participated in PM's for 3 years and about 250 in number. The reason for discontinuing, that unique experience, was the realization that I had observed not only the most common pathologies, but also some very rare disorders as well. The PM subjects ranged in age from birth to late nineties. I had developed a reasonable museum of preserved pathological organs, and was able to have students handle those organs at their leisure. I kept in touch with Mr. Bishop for some time until he retired and died.

I will mention but two PM's that impressed me greatly along with many surgeons and clinicians, from the Toronto General Hospital. The first PM demonstrates some of the medical 'quackery' not uncommon in the 1960's. The deceased was a Toronto medical doctor in his late 50's who had coronary artery occlusion with all of the attending symptoms. He was an advocate for a new surgical procedure developed in Texas, where the chest cavity and pericardium were opened and sterilized fine talcum powder was sprinkled over the heart muscle. The hypothesis was that this 'foreign body' would cause an inflammatory reaction with an increase in the number of arterioles into the myocardium, and with it an improved vascularity. For a short period of time there was measurable clinical improvement, but it was surely short lived. As any first year pathology student knows foreign bodies lead to the inevitable sclerosis and fibrosis of the afflicted area. The doctor died when his heart could no longer beat freely because of the massive fibrosis between the epicardium and pericardium.

His PM was attended by some of the best known cardiologists in Toronto, who were astounded that anyone, least of all a medical practitioner, would undergo such an 'idiotic procedure'. The pericardial space was totally obliterated, which literally strangled the heart.

The second PM would be interesting to chiropractors because the patient's chief complaint was severe vertigo, not an uncommon patient problem in chiropractic offices. The patient was 38, muscular, enjoyed good health otherwise, a farmer, and admitted to the hospital for specialist attention. In 1960, CAT scans, and MRI had not been invented, so that imaging examination was very limited. Physically he had no clinical findings other than the constant vertigo. His complaint had come on very slowly and reached a point where he could not function safely. He died rather suddenly, which completely surprised and upset the specialist clinicians, which included a Dr. Barnett, a leading neurologist in Toronto.

The PM table was surrounded by at least a dozen specialists, who had one way or the other been part of the deceased's examination in the hospital. When the cranium was opened and the brain cautiously removed, a small tumor was found attached to the dura surrounding the 8th Cranial Nerve (acoustic). The tumor was so placed that as it expanded it pressed medially, which resulted in the clinical picture above. If this had of happened today that young man would be enjoying his grandchildren and not lying in his grave.

Both cases angered the medical specialists but for different reasons. The first case angered them because a procedure was done (not in Canada, no surgeon would perform the surgery, but in Texas) that had no rational clinical, pathological, or research to support the procedure. I heard their discussion, which included the word "quackery". The second case angered them for another reason. They confessed to being clinically helpless to find the tumor, which came as a major surprise and disappointment to all. The discussion during and after the PM was highlighted by their now 20/20 vision. As a chiropractor witnessing this, I was thankful that the deceased had not consulted with me, and if he had I would have had the wisdom to refer to a neurologist when my treatment wasn't working. His thick case history suggested, that he had never consulted with a chiropractor

There were so many interesting PM's it would take a book to discuss them all. After nearly three years and 250 PM's I became a better clinician and I hope a better teacher.