

Two Medics Named “Bill”

Life is tough. A lot of what happens seems to be arbitrary and we are supposed to carry on. But, above all we need to have a good sense of humour and be optimistic, because some clouds indeed have a silver lining.

I was in grade thirteen, my last year in high school. At seventeen, I was six feet tall, all of one hundred and sixty pounds and not much of a football player. My coordination was probably average or perhaps slightly below. I had noticed that Butch Powell, a student in our school who was definitely coordinated, would run like mad for the ball when he went for a pass, and at the last possible moment would stretch out his hands and collect the ball with aplomb. That just wasn't my style. I too would run like mad for the ball, but with my arms outstretched during most of the run, hoping to hold onto the awkwardly shaped article and run with it until somebody ploughed into me.

I much preferred to play defence. There I got to tackle the poor player if he came over to my side of the line. The target was much bigger and it didn't seem to matter where you grabbed him — though preferably below the waist — as long as you just held on until the inevitable crash took place. On my side, I had lots of energy and enthusiasm, wasn't particularly worried about cuts and bruises, and I seemed to be making our high school football team. However, during one of those exhibition games early in the season, our coach made me play wingback; that is to say I might have to try to catch that infernal ball!

Sure enough, I was soon running like mad with, no doubt, my arms prematurely stretched out. The stupid ball was about

five feet over my longest fingers and I remember it descending gracefully into the hands of a player on the opposite team, about fifteen feet in front of me. Apparently I just kept running straight into this player, presumably with my arms still partially outstretched. Because of retrograde amnesia, I don't remember any of that last second or so.

I "came to" on my back and looking up. I saw a strange circle of helmeted heads looking down on me. I was vaguely aware of some mild pain at the back of my lower neck. It truly was a very mild pain and certainly nothing to write home about, as my mother would have said. It was embarrassing lying there with everyone making a fuss over me, and besides, I wanted to get up and find what had happened to that ball. I struggled to get up, and predictably these helmeted players rushed in to assist me — to the sidelines! With an arm over the shoulder and neck of a player on each side of me I was hustled off to the bench.

I was still a little groggy and undoubtedly my head was swinging side to side as I was transported off the playing field. Everything, however, seemed to work, although I still had that mild pain at the back of my neck. But the coach was watching me and I wanted to go back out on the field and show him that a little accident wasn't going to slow me down. Mr. Gilham was one of these conservative men, and he let me just sit there until the fourth quarter.

Having nothing better to do, I began testing my neck and found it was sore if I put it through a full range of motion, and I noticed if I clasped my fingers together and pulled forward on the back of my head, I would feel a peculiar burning sensation right inside my rectum. If I made a couple of fists under my chin and pushed up, I would get the same burning in the middle of my sternum. Odd, but again, nothing to write home about. Besides, I felt fine.

I slid along the bench and began to bug Mr. Gilham. He let me go back in towards the end of the game. As the other team had the ball and the play went around the opposite side of the field, I didn't get to show my stuff; I had wanted to do some spectacular tackle to make up for not having caught the ball in the early part of the game.

The next day, my neck didn't seem to be getting any better and I saw the school nurse, Miss B. She told me the school doctor

would see me the following day. That would mean I would miss one class, and if he was late I might be fortunate enough to miss two. That didn't seem so bad.

The next morning, Dr. McTavish gave me a good going over and pronounced that I had a "strained muscle." Good news! But I would have to stay away from football and any other contact sport until all symptoms had gone. Bad news! My mother even suggested I would have more time to study English, always my weakest subject. I didn't need to hear that.

Three days after the injury, I told my father about the peculiar feeling of heat in my rectum and in my sternum when I stressed my neck. He thought that was really weird and phoned an old school friend of his, Dr. Stew Thompson, who had become a pediatric orthopedic surgeon. He asked my dad to send me to the Toronto Hospital for Sick Children emergency department for x-rays early the next morning.

The Sick Children's Hospital! Why couldn't my father have gone to school with a friend who looked after *adults*? Was it really necessary? I would be the biggest kid in the emergency. I knew because I had, like most kids in Toronto, been there before for stitches or broken bones.

In any event, I had no choice, as my mother drove me there the next morning. Most of my fears were swiftly realized. I was indeed the biggest kid in the department. But hopefully, everyone would think I was here to pick up my little brother. The nursing staff spoiled my cover because I was soon wearing a green gown like all the other good little boys and girls! I don't think these gowns — if they were ever designed to fit anyone — were ever meant to fit anyone over the age of twelve. I kept my fists pushed well down between my thighs to try to maintain some respectability. I was glad none of the guys on the football team would see me. At least I was allowed to keep my underwear on. The only plus was that I was missing English and French. And if nobody asked me specifically, I would just tell my friends I had some x-rays of my neck, and not say where I had them.

After what seemed a long time, x-rays were taken. And then, almost immediately afterwards, two young doctors dressed completely in white appeared in the waiting room, asking for me by name. The older of the two men asked, in a thick Irish accent, "Which one then, is Tommy Goodwin"? I felt I was big enough

now to be called "Tom." And why couldn't he get my last name right? Also, I thought I was obvious, being at least six inches taller than the next tallest patient sitting in the waiting room. They seemed pretty serious though, so, somewhat reluctantly, I volunteered that I was the guy they were looking for.

The Irishman said, "Don't move your head!" Then he told me to "get very slowly out of the chair." And with the younger man behind me, and the Irishman in front clearing the way, we made our way into the plaster room.

On arrival I was told that, "Ye've got a *broken neck* lad! And you're to have a 'Minerva jacket' put on!" I told him I couldn't have a broken neck as it didn't hurt much, and what was a Minerva jacket?

"Indeed you have a broken neck, we saw it on the x-ray, and Minerva is the god of beauty. And you're going to be some beauty wearing that! A young lad like you should know all about that! Before we put it on, though, Dr. Thompson wants to examine you."

I started to protest again and began to show him that it couldn't be broken, "because, look how I can move it all around." He yelled at me to stay absolutely still. And I was just lucky, he said, "because in Ireland they would put you in tongs, instead of a Minerva jacket!" Thereupon my Irish bearer of bad news spoke briefly to the younger doctor and left abruptly.

The younger doctor, a first-year orthopedic resident who had not even opened his mouth up to this point, started to talk to me in a kindly fashion. He told me he was to sit with me until Dr. Thompson arrived. And he asked me to sit still and not move my head around or we both might get into trouble.

Under his arm, he had a big envelope of x-rays, which up to this point I had not even noticed. He proceeded to open it up and showed me my neck bones and the fracture. It didn't look that bad to me but he explained that I had lost about a third of the height of the body of my seventh cervical vertebra. Looking again at the x-ray, it began to make more sense. He explained to me that a Minerva jacket was a body cast and after a day or so I could walk around in it. He had seen other people with them and it wasn't as bad as it looked. He told me that Minerva was supposed to be a Roman goddess of beauty, and they probably named the cast after her as a sick joke. (I didn't

find out until years later that Minerva was in fact the goddess of wisdom.)

When I asked what the other doctor had meant by “tongs” he was somewhat reluctant initially to tell me. But when I anxiously pressed him he opened right up. Tongs were really like ice tongs that one might use to lift a block of ice out of the water. The tongs that they used on people were smaller, but they did indeed have to stick them in the side of the patient’s head, and the patient had to lie on a sloping mattress with the tongs attached to a rope with a weight that went over a pulley in order to maintain the correct tension. He told me that he thought it very unlikely that Dr. Thompson would use them on me.

A message came that Dr. Thompson was going to be further delayed, so this young man sat with me and asked me a lot of questions. He even asked me what I planned to do the next year. I told him I didn’t really know. I didn’t like school that much. I had vaguely thought of applying for pre-med, but I had found high school pretty “crappy.” Besides, I thought of myself as more of a physical person. This young intern was very supportive. He was a doctor and still very personable. Unlike my teachers, or our family doctor, he asked me to call him by his first name, “Bill.”

I told him that, for some reason, I always did very well on exams in school and that even my marks in that dreaded English were acceptable, although they always pulled my average down. He strongly encouraged me to consider going into medicine. It was reassuring having this doctor sitting beside me and distracting me by talking about interesting things. I was much less anxious when Dr. Thompson finally arrived.

Dr. Thompson was all business. He looked very harried and asked to see the x-rays. Then he came over and tapped on my spine at the back of my neck and upper thorax. I said one of the taps felt a little sore. He repeated it and said that that was the broken one and then turned to me. He asked how my parents were, and before I had time to answer said, “A jacket would be fine,” and was gone.

Tongs and the Minerva jacket would not be used now for this type of injury. Instead, various orthopedic appliances have been developed that support the neck, but are much more comfortable to wear.

I felt pretty vulnerable, but fortunately Bill stuck with me and kept up the chatter and even told me some jokes. The plaster orderly soon arrived and got down to business. He formed a big stocking-net to fit over my upper body; it had armholes, a big hole for my face and two holes for my ears, and he tied the top of the stocking-net in a big knot over my head. Bill served as the orderly's assistant and, fortunately, continued reassuring me. Next, a big bunch of padding material was wrapped around and around me. Finally the plaster arrived in warm water, and roll after roll was wrapped around me, covering me about four inches below my navel to the top of my head. Spaces were left for my ears, my face, and a circular space about five inches in diameter was left over my upper abdomen. The big knot was left sticking through the very top of my cast. At first, it felt fairly comfortable. It was warm as the plaster was drying, but my neck now felt a little sore and I noticed it was difficult to take a decent breath.

Pretty soon the Irishman was back. "I see you didn't get the tongs! A pretty sight, aren't we? A real beauty. Yes sir!" And off he went again.

Bill helped me on with my clothes, although nothing would now fit above my waist and I couldn't even do up my trousers, and took me back to the waiting room where my poor mother had been waiting patiently all this time. Bill even took the trouble to show her my x-rays, my mother always being interested in that sort of thing. He told her if I was having trouble to bring me back to the Emerg. He then put his arm around me and the cast, assured me I was going to be all right, and told my mother he'd had a nice chat with me, and said I should seriously consider going to medical school. As we were going out to our car she said, "If you are going to be a doctor, I hope you will be a nice one, like that young man."

In the car, the cast now seemed cold and very hard. My neck was getting really sore and I was still bothered by the fact that I couldn't seem to take a big breath. I couldn't even see properly as I couldn't twist my body in the car to look out the side windows. In the hospital I had kept up the chatter and tried to maintain a little of the macho image, but I began to realize that I was really quite fearful underneath. I was having a bad day and things were only going to get worse.

I ate very little lunch and even less supper. I just couldn't find

a comfortable position. My neck was really sore now. The cast felt very bony and even that large knot on the top of my head was pressing down and getting sore. But the biggest problem was the feeling that I just was not getting enough air. I knew I must be, as I could breathe in shallow breaths as fast as I wanted, but I just couldn't take in a decent amount of air in a proper breath. Giving a sigh was out of the question. I didn't tell my parents though, as I thought I was probably panicking unnecessarily. Perhaps, if I couldn't take the "jacket," they would put me in those awful tongs!

Then that evening, Dr. Thompson phoned to tell my Dad that they had seen something very unusual at the base of my skull. I had had a previous injury of my first two neck vertebrae.

I had apparently been a breech (legs first) type birth, and my mother being very small, the doctors had some difficulty with the delivery. My right arm had been paralysed during the extraction process, and remained so for the next three months. But eventually I got complete function back, although I remained left-handed. My father always joked that they had to sew my mother up like a Christmas turkey after this delivery. In any case, Dr. Thompson thought I probably should not play any more contact sports. I certainly didn't need to hear that.

I went to bed very early that first night, but I couldn't find a comfortable position. If I lay down flat I just couldn't breathe. I spent the night sitting up straight, or trying to lie back at about forty-five degrees. I don't think I slept at all, and I just waited until my parents woke up in the early morning. I told my mother I thought I should go back to the hospital because I just couldn't get used to not taking a deep breath, and it was quite frightening. She took me down immediately, and I didn't care anymore if I *was* the biggest kid in the Emerg.

I must have looked pretty uncomfortable because I was ushered into the plaster room very quickly and the plaster orderly and my friend Bill soon arrived. Bill was going to show me that the little saw that they were going to use to cut the front of the cast to allow me to breathe wouldn't cut my skin. I didn't care at that point if it did cut my skin; I just wanted to take a big breath.

They made a cut in the plaster from the bottom of the face hole to the top of the hole they had previously left over my abdomen. I don't think the cast opened more than an inch but it

was enough, and I was immediately a lot more comfortable. The Irishman came into the plaster room and said, "They didn't have breathing problems with tongs!" and then vanished. Fortunately I never saw him again. My friend Bill reassured my mother and me, and said he didn't see why that cut wasn't put in every body cast before the patient went home.

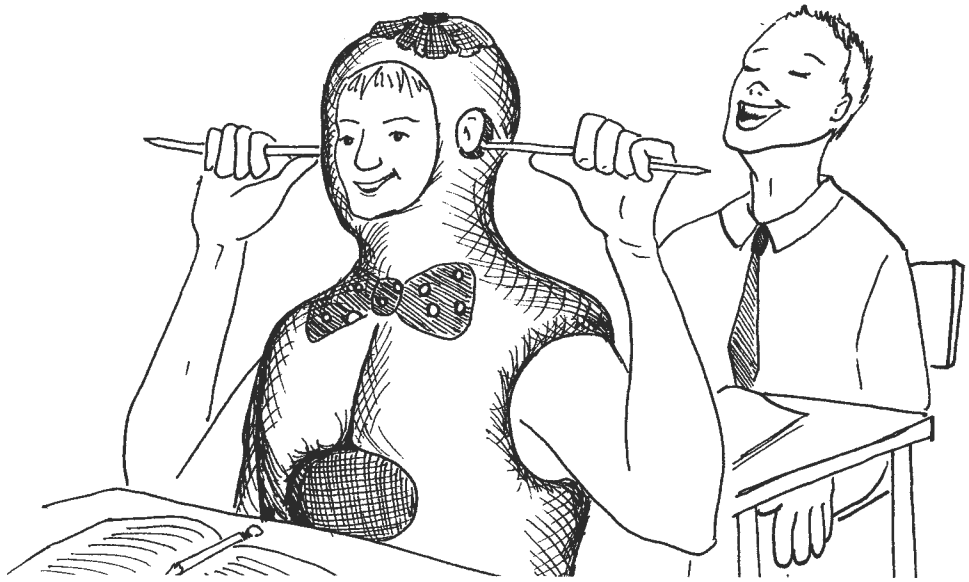
My mother was always polite, but on the way home in the car, she kept asking why the doctors had to be so dumb. After all, breathing was important, and the new cut in the cast didn't interfere with the immobilization of the neck. She also didn't like that "stupid knot" on the top of my head. I didn't like it either. The natural elastic recoil of the stocking-net was still pulling it down on the top of my head, which was becoming increasingly tender.

As soon as we got home, she went to work and untied the stupid knot, pulled the stocking-net material well up through the small hole in the top of the cast and put some household glue around the opening. She then stretched the fabric well down and taped it there until the glue dried. It was a big improvement. The top of my head was no longer tender and my mother said a lot of hot air would now be able to escape. I now knew I was going to live and could probably tolerate the six weeks I would have to wear the "jacket."

My neck remained sore for the next couple of days, but I had few further problems. I missed only one day of school because it was Friday when the cast was put on, and I was okay by Monday. My friends were suitably impressed, but I was quite worried about not being able to play contact sports again. Football was all right, but I really enjoyed wrestling and boxing, and I just knew there had to be some solution to this problem.

One advantage I noticed right away with my new cast was that I could sit forward on my desk at school, and the cast acted as a support; I could actually sleep quite comfortably in class in this position. It was a real advantage, as some of the classes seemed so repetitious. The teachers either didn't notice, or just felt sorry for me and didn't disturb me very often.

Our school was quite formal and, among other nuisances, we had to wear a shirt and a school tie every day. Before my injury, I always seemed to be in minor or major difficulties with the school authorities. But with this cast, I noticed I seemed to get away with some things that weren't previously overlooked. I



Playing the fool in French class, giving my scalp a good scratch.

asked one of my friends to paint a large bow tie with pink polka dots prominently on the front of my cast. These were decidedly not school colours! Our first class the next morning was French, with definitely not my favourite teacher presiding, the much feared Mr. S. To his credit, he said nothing, and even pretended, I think, not to notice my new tie. Even in the Prayer Hall during morning services nobody in authority said anything. I was a bit disappointed.

I think there must have been a bit of a smell to my cast, particularly as the weeks wore on, but fortunately, nobody said anything to me. It became increasingly itchy, particularly at the back of my scalp, but my good old mother was once again up to the task. She produced one of those flexible knitting needles used to knit sleeves in sweaters. I used it to great effect to scratch the back of my head by inserting the needle in one of the ear holes of the cast and out of the other. Because of the very flexible middle part of this type of needle and the straight and stiff ends that are meant to pick up the stitches, when I inserted the needle into the ear holes of the cast and pushed the needle back and forth about an inch, it appeared that I had run the needle through one ear and out the other. It always got a good laugh in class. In fact, some of my classmates couldn't seem to get enough of it and would laugh

uproariously every time I used this needle. I was pleased to see it annoyed my French teacher, but again to his credit, he never said anything.

Six weeks later the big day for me finally arrived — the day I was to get my cast off! It had become really itchy and I know, by now, stinky. My good friend Bill was there again. He complimented my mother on getting rid of the knot, the knitting needle and of course the excellent bow tie. I was given an appointment to see Dr. Thompson in a week in his office.

When the cast was finally off, my whole upper body felt strangely light, my head very wobbly, and I didn't have to be warned to take it easy for a month until my neck muscles got used to carrying my head around again. My skin was very scaly, and I owned the worst case of dandruff I had ever seen on anyone.

When I got home I had a bath (we didn't have a shower in our bathroom at that time). When I pulled the plug at the end of the bath, I had to reach in three times with my fingers to pull the dead skin off that little cross below the plug, so the water could run out! I had a bad case of dandruff for about week, and then it cleared up spontaneously.

It had been a Friday when the cast was put on, and it was taken off on a Friday, so again I had two days to adjust before going back to school. I usually rode my bicycle to school, but since my injury I had had to take the bus. The Monday after the cast was off, when I was on my way home on the bus (I wasn't supposed to ride my bike for another month) two middle-aged ladies sitting together were talking so loudly that I couldn't help overhearing. One of them told her companion that last week she had seen this poor high school kid on the bus with a body cast on. He didn't look very well and the cast really smelled awful. With my head covered in heavy dandruff, I didn't volunteer that I knew who that kid was. I was suddenly very impressed at how tolerant my poor friends had been about the smell.

My cast had only been off for about two weeks when I stumbled into Bill Davison, another "Bill." He was three or four years older than I was and had just started his first year of medical school that fall. He had always been a nice guy when he was in high school, and was pleasant to the younger kids like me. He had been on the football team, and was a steward at the school in his day.

Dr. Thompson wasn't very encouraging about my ever playing contact sports again; however, I was absolutely determined to prove him wrong. I started an increasing exercise program. I lifted a lot of weights and did multiple neck bridges in an effort to make up in muscle what I lacked in bone. Weight lifting wasn't very popular in those days and we were always warned that we might become "muscle bound." With my skinny body, I didn't have to worry about that. But with aging, going from age seventeen to twenty and, perhaps all this exercise, I gained twenty-five pounds, and possibly most important for me, my neck went from a size fourteen to an eighteen.

By this time I was in first-year meds and when I told one of our anatomy demonstrators my neck story, he arranged for me to see one of his friends, a cervical orthopedic specialist, Dr. Wallen. This man took numerous x-rays and suggested that I was "pretty good" and, though he didn't want to put it in writing, he at least intimated that I could likely survive contact sports again. I didn't need to hear more. I joined our university boxing team, and played rugby for the Toronto Old Boys.

Strangely, I did eventually suffer another neck fracture, but it had nothing to do with any previous problems. I broke the spinous process (a finger-like bony projection extending back from the vertebra) off one of my neck vertebrae, apparently a pretty common injury, called a "shoveller's fracture," in a wrestling match. This injury has no long term consequences and I made a full recovery.

He asked what I was going to do after I had finished high school. I told him about my neck injury and that I was considering trying to get into pre-med. He thought that was a great idea and suggested that I spend a day with him at med school. I was surprised people were allowed to do that, but, naturally, I jumped at the offer. He suggested I should come down on a morning when he had anatomy class so that I could see all those dead bodies that everyone spoke about.

Soon afterward, during some high school day off, Bill arranged for me to meet him at the bottom of the stairs of the anatomy building. He got a lab coat for me, so I wouldn't be so noticeable, and we proceeded up to the top floor of the building and into a very large room. There on steel-topped tables were

about twenty of the promised bodies, all covered with some type of coarse cotton wool and then wrapped in a sort of oilcloth. The smell of formaldehyde was initially overpowering.

I was invited over to his table where his partners were in the middle of a dissection, apparently of the lower arm. It seemed pretty awful, with the smell and all those students practically leaning into the dissection. Everything seemed sort of greasy, and the actual tissues were a nondescript brown colour. Books were lying on top of the portion of the body that was under wraps, and there were more books on the floor. I noticed some of that greasy stuff was even on some of the pages of their anatomy atlases. Everyone seemed to be talking or poking at some bit of tissue; and one student sat on the floor with a bunch of pages spread out before him, reading something out loud from his notes.

An older doctor came over and asked who was I. Bill came over quickly and told him that I was a very good high school student who was thinking of going to premeds the following year. He didn't seem to mind. (I thought that poor Bill and I were going to get into trouble.)

This man, apparently an anatomy demonstrator and, as it turned out, quite a character, took me over to the arm that was obviously under serious demolition and asked me the name of a fairly large muscle he had picked up in his forceps. I of course had no idea, and he then told me it was the "brachio-radialis." He then asked me to take off my lab coat and show him my brachio-radialis. This time I got it right, as I simply had to compare the arm of the cadaver lying there and my own arm. He seemed pleased, and told me that I had quite a big brachio-radialis muscle for such a skinny kid. Then he asked what the muscle did. I tried flexing it in various ways and by forcing my wrist up against resistance was able to make it stand out consistently.

Then, amazingly, he said with a laugh that I must be a big masturbator to have such a well-developed muscle. I took to this man immediately because, despite his age, he talked at my level and didn't take himself too seriously. Entering into the spirit of things, I told him it couldn't be from doing that because I was left-handed. He then immediately asked one of Bill's partners how they could determine whether I was, in fact, left-handed. When nobody seemed able to answer the question immediately, he pulled out a measuring tape, asked me to hold out both arms,

and at a specific distance from my elbow crease measured the circumference of both forearms, marking the measurements on the skin of my forearms with his ball point pen. He determined by measuring three times that indeed my left forearm was five millimetres bigger around than my right, and therefore I was probably left-handed. Then, with a big grin, he said I should probably change hands in the middle of things if I wanted to be more symmetrical.

In the course of this conversation, he often referred to other nearby muscles and tendons, discussed the origin and insertion of this and related muscles. And to this day I will never forget the name of that muscle, the brachio-radialis.

What a difference from high school. Here I was in a class (“illegally”) and nobody seemed to mind. The teacher had a great sense of humour, I had learned something worth remembering, and medical school could even be fun! Learning all about some uninteresting poem in English class, discussing for hours what the author *really meant*, didn’t seem to me in any way as important as the origin and insertion of the brachio-radialis muscle.

Bill’s class in anatomy continued till noon, and then there was supposed to be an hour off for lunch before the afternoon class came in to do their dissection on the other side of the body. Bill’s group was supposed to wrap its half of the body very carefully and put it to bed, at least before one o’clock.

As we were getting ready to leave, I noticed some of the students were starting to unwrap their lunches, and one of them was actually eating a hot dog. He was sitting on the floor with his back against the wall, his anatomy atlas spread out on his lap as he was reading to the others doing their dissection.

I was a little horrified, but Bill explained that some of the guys were a little behind in their dissection and it was the only way they could catch up. Indeed, he and his group had to stay over the lunch hour quite often. Biochemistry started at one o’clock in the main lecture room and if you wanted to eat at all, you had to do it when you could.

Although I couldn’t have known it at the time, exactly three years later I would be sitting on the same floor, my back against the wall, with *Grant’s Atlas of Anatomy* spread out on my lap, eating a hot dog. Even that same greasy brown stuff was on some of the pages of my book.

That particular day Bill got off shortly after twelve o'clock and he invited me to his fraternity house for lunch. There was another student there from second-year meds and he asked if they had "opened the chest." Bill said they hadn't gotten into the guts yet, whereupon his friend said they should have a "pre-cadaver course." Bill didn't know what his friend meant by that comment.

His friend explained that the previous year his group had a cadaver that must have weighed two hundred and fifty pounds, and they often couldn't find their landmarks (some of the smaller muscles, tendons and organs in the abdomen were very difficult to find). His opinion was that those people near death, who obviously had nobody to claim them, and hence their body would likely be used for science, should be put on a diet and a weight lifting course, and on the day of their death should be given an enema! He said it would certainly improve the quality of the cadavers that the students had to work with. I was shocked that he would say this to Bill and me; it was my first initiation to the gallows humour of medicine.

In the afternoon Bill took me to that dreaded Biochem lecture. To my surprise, I thought it comprehensible and even interesting. Bill kept apologizing about how difficult it was. I honestly didn't think it was all that bad; some of that inorganic chemistry we had to learn in high school with all those equations was a lot worse. I noticed that some of the students in the class were quietly whispering to each other. And in the hallway, at the very back of the lecture hall, some students who were apparently supposed to be listening were playing bridge at small tables. Nobody seemed to mind, and Bill said a lot of the students had used last year's notes that they got from their friends from one or two years ahead of them. It didn't matter, as long as you knew the information, passed the exams during the course, and the final exams at the end. It all seemed very relaxed, and so much better than my high school experience.

I had stumbled into a player on the opposite football team, and because of that, into these two Bills in medicine. My fractured neck likely was the final straw in getting me to apply for pre-med school, so perhaps my injury did have a silver lining. Without any reservation, I applied to the pre-med course. Fate

had enrolled me on a fifty-year course in medicine, first as a student, and then as a practitioner, and ultimately as a patient.

After I had been accepted, one of my dear uncles asked me one day what kind of doctor I wanted to be. I said that I didn't know, but whatever kind I turned out to be, I wanted to be the kind that was nice to the patients and the students like my two friends, both called Bill.