Knee-Jerk Reactions: My Misadventures in Diagnosing Osteoarthritis

My second year of medical school was abit of a blur. I do remember, however, struggling to stay awake in one of the lecture halls on (was it a Monday?). The title on the board was “degenerative joint diseases”. Then, I wasn’t quite sure what it actually meant. Of course, we tend to associate these lectures with our own experiences, so I thought back to seeing my late grandmother, walking very slowly, having weird shaped knees, unlike me and my siblings. My knees look like that was demonstrated in the anatomy classes and dissection rooms. So why was my grandmother’s different? Does the bone change in really, really old people? Was it something to do with ligaments? As the lecture droned on about cartilage degeneration, the increased water content, narrowing of the joint space, and the ominous-sounding “osteophytes”, all I could think about was my next cup of coffee (and a banana bread with it).

Fast forward a few years, it was my first clinical rotation. We were shadowing an orthopaedic surgeon – an intimidating man, he could silence a room full of rowdy medical students with just a raised eyebrow (I do find it one of my inspirations though). This was my first encounter with a real-life patient with knee pain. The patient, an elderly gentleman, was holding a cane, hobbling inside with a grimace on every step. My mind immediately raced back to a vision of my grandmother walking, and that hazy lecture on osteoarthritis. “Aha!” I thought. “I know the diagnosis”.

I puffed out my chest (silently, in my mind’s eye) and declared, “Sir, you have osteoarthritis!” The patient raised his eyebrow (eerily reminiscent of the surgeon), while the surgeon at the side stared at me, as if I had just announced the discovery of a new ligament. The surgeon gently asked, “and what makes you say that, Harald (outside of Malaysia, my name is quite difficult to pronounce)?”

Stammering (only slightly), I rattled out what I could remember - joint pain, old age, and, well, it just seemed like the kind of thing this patient would have. The surgeon gave a slight nod, “Very smart of you, but remember not to always jump to conclusions. Remember, Harald, not all knee pain is osteoarthritis.”

Undeterred, I set out on a mission (partly the reason why I ended up where I am).). If it walked like a duck, quacked like a duck, then it must be a duck, right? In my mind, every patient with knee pain from that day forward was suffering from osteoarthritis. Young athlete with a swollen knee? Osteoarthritis for sure. Middle-aged woman with sharp knee pain? Obviously osteoarthritis. Fell from the stairs and has knee pain? What else? My confidence grew with each self-made diagnosis, I felt that I was the second coming of House (this reference probably only understood by millennials). Of course, a lot of the time as a student, I dove straight for the case notes, convinced that all the answers were held in that sacred text, copied and pasted by all who attended the patient.

Things took a turn (a lot) later on, during my medical officer days when I encountered Mrs. Lee, a sweet lady in her late 60s who had been experiencing persistent knee pain for several weeks. I was convinced of my osteoarthritis-detecting prowess, ready to

impress the patient and my consultant with my instinctual diagnostic skill and razor-sharp clinical acumen.
As I started to explain my hypothesis to the Professor (who magically appeared in my consult), he casually stopped me and asked Mrs. Lee about the nature of her pain, and the involvement of other joints, and also commented that she looked abit thin. She confirmed she had lost a significant amount of weight recently without trying, and the pain seemed to be worse at night, and better after activities. He then proceeded to check Mrs. Lee's hands, which also appeared red and swollen.

I was stopped in my tracks. Something did not click (or more accurately, it clicked that I was being foolish). I recalled a fleeting memory from the lecture many moons ago, something about differential diagnoses. There was a mention about how not all knee pain was benign, and some could be indicative of something more serious—like a sinister cause. There was also something my previous lecturer said about not jumping to conclusions.

There was a rush of blood to my head. Was I missing something important? I suddenly felt the weight upon me—what if all those cases wasn't osteoarthritis after at all? What if it was something that could have been treated differently? My mind raced with possibilities, and for the first time, I realized that knee pain wasn't just a symptom to match to a diagnosis, but a puzzle that needed careful consideration.

My Professor (god bless him), sensing my internal struggle, stepped in. He gently guided me through the thinking process of considering the differential diagnosis, explaining that while osteoarthritis was common, it was critical to consider other causes of knee pain—like autoimmune conditions, malignancies, infections, or referred pain. Mrs. Lee was eventually referred for further investigation of a condition abit more complex than I had imagined, and the experience left an indelible mark on me.

This journey from cluelessness to overconfidence to humility isn't just about learning the nuances of diagnosing knee pain—it was a lesson in the art of medicine itself. While it's easy to fall into the trap of thinking you've got it all figured out, true understanding comes from recognizing the limits of your knowledge and the importance of always recognising the forest from the trees.

And so I continued my postgraduate journey, a little wiser and a lot more cautious. Even now I still have a lot to learn, and I know better than to treat every knee pain as osteoarthritis. Instead the best method is to approach each case with the curiosity of a detective and the humility of a student who knows that the best learner is one who actively try to find out what they do not know.