

At the Heart of

DISSECTION ELECTIVES

Text by Faye Ng Yu Ci



Standing over the silent mentor prepped in my blue gown, gloves and goggles, scalpel and forceps in hand, I was at a loss of what to do. My hands had been taught the basics: how to load the blade into the scalpel holder, hold and position the scalpel against the body, and make the first incision. My mind knew the anatomy: I could name the muscles of the forearm, state their origins and insertions, and explain the ulnar paradox. Yet, in the face of a real body, still and embalmed, I realised how unprepared I was to handle the gravity it represented – its flesh and bone, its nuances and variations. For all that we have learnt over the course of our first year in medical school, we remain at the tip of the iceberg; the blue underneath is unending. Besides, having the knowledge is one thing and putting it into practice is another.

Similar to historians who study the past to reimagine the future, medical students and doctors study the dead to save the living, hoping to glean experience and expertise by carving through muscles, organs and vessels. Through dissection, we study

features and relations in close detail, training our dexterity and hand-eye coordination, fumbling around before we gradually figure things out.

In the beginning, it was difficult getting used to the idea of the cadaver. In our largely traditional and conservative society, death and dead bodies remain taboo topics we shy away from. Before entering medical school, most of us rarely, if ever, had candid and meaningful conversations about these weighty subjects. It is only as doctors-to-be that we start to approach and understand our eventual fragility and fatality, confronting our fears and preconceived notions of what death and dying looks like.

The notion that the human body is fundamentally sacred and sacrosanct is a timeless and revered one. The act of dissection hence feels like an infringement of personal space and autonomy, even when justified on the grounds of medical education. This explains the medical student's initial hesitance, along with his or her guilt and unease, which gradually fades but is still evoked from time to time. Despite being awed by the human body's intricacies and complexity, a part of us remains opposed to cutting through a corporeal body in order to be privy to its logic. Such are the contradictions we will have to continuously grapple with as we progress through our medical journeys and encounter various ethical dilemmas.

The first cut

The first cut is always the hardest. From there, the dissection unfolds. After overcoming our inertia to put blade to skin, the process of cutting along skin markings was swift, with ten or so of us working on different regions of the body. The blade was unnervingly sharp, the skin of the silent mentor parting easily as our scalpels skimmed horizontally across his chest. Clearing out the subcutaneous fat proved more tedious, due to the neurovascular structures embedded within that we had to work carefully around to keep intact. The nerves, which were

thin and blended easily into the surrounding tissue, were especially hard to preserve. Often, we learnt caution through trial and error, by inevitably cutting a few structures ourselves.

After peeling away skin, clearing out fats, reflecting away muscles and cutting through ribs, we finally opened up the anterior wall of the chest and abdomen. It was illuminating seeing how the body is put together by elucidating the relationships between organs and structures with our own hands. Previously, in our anatomy halls, we studied prosected specimens by individual regions, including the head and neck, abdomen, and lower limb, prepared for us by our professors. Dissection electives was our first time performing hands-on procedures on the silent mentors, where we reviewed textbook knowledge through application and let passive facts take on newfound meaning and significance. At the same time, the process of dissection taught us patience, as we sat through mornings and afternoons cutting through the layers, the smell of formaldehyde no longer as pungent as we grew accustomed to it, our hands working intently to clear away fat and fascia, revealing the underlying structures.

The silent mentors we were working on all had unique causes of death: metastatic breast cancer, gallbladder cancer, cardiac arrest, cerebrovascular stroke... My group's silent mentor, Mr G, for example, died of pneumonia and ischaemic heart disease. Upon looking at his organs, we found that his heart was visibly enlarged with thickened muscular walls, while his lungs had a firm and elastic texture, with areas of consolidation. All these correlated with his medical conditions and causes of death, exposing us to pathology before we were formerly taught. Through our silent mentors' bodies, we also glimpsed the everyday lives they led. The black spots on Mr G's lungs indicated that he was a smoker and the thick layer of fatty deposit underneath his skin suggested he enjoyed fatty and oily food.

Thankful for the experience

These precious weeks of dissection electives helped me to revise and reinforce my anatomical knowledge learnt over the past year and gave me a prelude to surgical postings in Year 3. Moreover, they made me appreciate how mortal and human we all are – both the silent mentors and us wide-eyed, incorrigibly curious students. In our own ways, we are fallible and make mistakes, but we also possess the potential to contribute and be a part of something greater than ourselves.

In the anatomy hall, I experienced excitement and adrenaline, frustration and ennui. Yet most of all, I experienced gratitude – for the unspoken selflessness shown to us by our silent mentors, who gave us the opportunity to learn using their bodies, as well as for the kindness of their family members, who granted us the grace of their loved ones. The immensity of their sacrifice reminds us of the many people who have given without expectation and supported us in our journey to become doctors, reminding us to serve with both our minds and hearts. As one of our professors said: "Even with advancements in technology and artificial intelligence, a heart can only be trained by another heart; a heart can only be touched by another heart." ♦

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