

Meeting the human body: post-dissection reflections

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I have had the rare opportunity to spend three courses totalling 22 days exploring the human body through dissection. These courses have, hands down, been some of the most powerful experiences I have had – personally and professionally. They have challenged much of what I have been taught, what I thought I knew. The forms, in their silence, have showed me life in a whole different light.

I am a firm believer in the power of touch. Our hands are invaluable tools in assessing what is going on; through our hands we receive and convey information. I know when something works, because both the client and I can feel the change. I personally have felt the change when I have had various forms of manual therapy. But I have no idea what is happening. There is so much about touch that we don't understand, that we can't explain. There is so much we cannot measure, that cannot be explained by the limited theories we have access to today.

We feel what we touch based on a preconceived perception of that we are touching, and on our prior experiences influencing how the brain interprets the signals conveyed through touch. I have worked with my hands for years. I have believed that I have been working on muscles, and in the more recent years, deep fascia. Now I am not so sure what I am working on. Having seen the body from the inside, the intricate and complex connections and continuities, I find the theories I previously based my work on inadequate and simplistic. The definitions I have used for what happens in the body have been demoted to a very basic level, compared with what I have seen and touched, literally under the skin.

I have read about the continuation of the gluteus maximus into the tensor fascia latae ¹; but I have seen how this continuation is so much more. The gluteus maximus also merges and becomes both the biceps femoris (knee flexor) and vastus lateralis (knee extensor), and not just into the intermuscular septum. And this septum that purportedly separates the hamstrings from the quadriceps, is it really a separator? So how can we define the function of the gluteus muscle? And why is this even of interest, since no muscle ever works in isolation? Muscles are intricately connected with all tissues around them through various forms of fascial tissue, nerves and vessels. In fact, muscles are nothing without the container given them by fascial tissue. Indeed, when looking at the muscles, there is no clear line where they start and where they finish. The lines that are there are the ones we have created with a scalpel. Yet we talk about separate muscles, we base our research on separate muscles. We measure movement and compose exercises based on the idea of separate muscles. Not to mention the focus on muscle tissue while neglecting the whole connective tissue complexity.

I have read about connective tissue and about fascia ²⁻⁸, and I am fascinated by this structure in the body that for many years, I was completely unaware of. Having seen fascia, having held it, having severed it brutally with a scalpel – nothing I have read does justice to what it is like to see and feel its many variations. The role of this structure, and the fact that we know so little about it, awes and humbles me.

I have read about scarring, I have seen scars, I have seen operations. I have seen their consequences on movement and on pain. But seeing the consequences of scarring and operations internally, I have much more respect for the fact that there are consequences to what we do, always. The body is its own ecosystem, and it reacts to everything that happens to it. Internally and externally. Physically, physiologically, psychologically, emotionally, socially, culturally, environmentally.

I have seen how the heart and the diaphragm share the same fascial sheath. I have seen how the diaphragm becomes the transverse abdominus, and flows down into the psoas major with no

dividing line between them. I have held a human heart and brain in my hands. I have seen how the nerves and vessels weave their way through every tissue in the body, fine filaments that enable us to live. I have explored the details and connections of the pelvis, both male and female, where very little is as I thought based on what I have read in chapters and papers on pelvic anatomy. This has made a tremendous difference to my work with people who suffer from pelvic pain, and my view of what it means to work with this complex group.

Seeing all this, so much of what I thought I knew, what I base my practice on, starts swaying. The explanations I have received, and that I have passed on, are crude simplifications. I find myself on shifting ground. The separations that we see in the anatomy books do not exist. They have been created by anatomists. Yet this view of the body is what we base much of our work on. We have a lot of theories about the human body and how it functions. We have developed amazing techniques for 'treating' the body and there is much that works. But there is also much that does not work, or that is short-lived at best. The body, or parts of the body, cannot be understood in isolation from the body as a whole, or as a part of a larger context. Science as we know it cannot tell the absolute truth, and it can be interpreted in many ways. How good are we at critically reflecting over what we do, and over the consequences of what we do? And what about the condescension and belittling of other traditions and explanations than those we personally believe in? Life is more complex than we can comprehend. Why are we so afraid of other explanations and perspectives than our own?

There is simply too much that we don't know. There is too much variation in this world to claim that there is only one way that is correct. Different things work on different people. Different people will be good at different approaches to treatment. Our own ways are constantly being revised as new research comes to light.

As the last dissection I attended was coming to a close, I was acutely aware of how much I don't know, how much I base my opinions on theories that might turn out to be disproven. Research has an important role to play, but the essence of research means that we cannot completely understand. Because it is impossible to factor in all the different components that affect how we move, how we heal, how we feel pain, how we function in and respond to different social, cultural or environmental contexts. It is impossible to remove ourselves and our beliefs from the process of knowledge production, even in the most rigid randomised controlled trial. Yet this is what we have to work with. So how do we broaden our understanding – professionally, respectfully, creatively, ethically and rigorously – within the framework that we have?

We all walk around with the most amazingly complex structures that we have varying relationships with. Some of us work with this more intimately than others - either our own, or the bodies of others. It is not possible, practically, for everyone who works with bodies to do extensive dissection work. It is not something that everyone wants to do. But there are lessons to be learned even so.

What I come away with from this experience is a deep sense of humility towards working with the wondrous body system. Humility towards the depth and breadth of everything I don't know. A heightened respect for both my own body, and for those of the people I work with. We will never know everything about the body. But we can be cognisant of its complexity and humble in the face of our own limitations. We can be curious about the many ways of working with the body that are out there. We can be better at learning from each other, across different disciplines. We can be respectful of the knowledge of others, and the understanding that our different definitions might just be different perspectives of the same thing. Through meeting different ideas, we can come to a better understanding of our own.

Almost 15 years of being a physiotherapist later, and a whole new world has been introduced to me: the human body.

Linköping, August 2017
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References

1. Antonio S, Wolfgang G, Robert H, Fullerton B, Carla S. The anatomical and functional relation between gluteus maximus and fascia lata. *Journal of bodywork and movement therapies*. 2013;17(4):512-7.
2. Schleip R, Baker A, editors. *Fascia in sport and movement*. Edinburgh: Handspring Publishing; 2015.
3. Schleip R, Findley TW, Chaitow L, Huijing P. *Fascia: the tensional network of the human body: the science and clinical applications in manual and movement therapy*. Edinburgh: Elsevier Health Sciences; 2012.
4. Schleip R, Klingler W, Lehmann-Horn F. Active fascial contractility: Fascia may be able to contract in a smooth muscle-link manner and thereby influence musculoskeletal dynamics. *Medical Hypotheses*. 2005;65:273-7.
5. Stecco A, Gesi M, Stecco C, Stern R. Fascial components of the myofascial pain syndrome. *Current pain and headache reports*. 2013;17(8):1-10.
6. Stecco C. *Functional atlas of the human fascial system*. Edinburgh: Elsevier; 2015.
7. Stecco C, Stern R, Porzionato A, Macchi V, Masiero S, Stecco A, et al. Hyaluronan within fascia in the etiology of myofascial pain. *Surgical and Radiologic Anatomy*. 2011;33(10):891-6.
8. Stecco L. *Fascial manipulation for musculoskeletal pain*. Padova: Piccin; 2004.