



Research in Anatomy “There is Nothing New About” Should I do it?

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Abstract

While planning anatomical research, the query “Should I plan research in Anatomy, as everything visible to the naked or aided eye is already there in literature” might haunt you. Though human body structures may not appear to change, the ways of viewing it, approaching it, and conceptualizing it, definitely do. This paper discusses the importance of anatomical research with the modernization of surgical technology, radiological interventions, and others. Future recommendation regarding research has been presented.

Keywords: Anatomy; Cochlea; Dissection; Research; Surgery

While planning anatomical research, the thoughts like there is nothing new in the human body structure; the details of every part of the human body, have already been discovered by now; may bother many of us. Though human body structures may not appear to change, the ways of viewing it, approaching it, and conceptualizing it, definitely do. The advances in medicine and the emergence of super specialty branches mandate microsurgical knowledge of each anatomical structure according to the new techniques and equipment. In the modern era, not only surgery needs anatomical expertise, but interventional radiology is all based on anatomical awareness and research. New prostheses, implants, and robotics are being invented and used in the medical field each day, demanding finer anatomical details and data as per population, age, gender, and race, e.g. the anatomy of the cochlea was never studied meticulously, before the advent of cochlear implant (CI) surgeries. The success of CI not only demands the accurate topographic anatomical details of this region but the precise information on the size, and spirals of the cochlea is also imperative for designing electrodes and implants.

An anatomical discovery is considered to be a rare happening and is not reported often. Recent discoveries like the lymphatic system for the central nervous system, reporting of previously unknown parts of the human mesentery in adults, and documentation of a new tissue component ‘interstitium, a networked collagen-bound fluid-filled space existent in a number of human organs, make believe researchers for the possibility of new detections [1-6].

As per Eizenberg (2015), a senior anatomist “In all my years of coordinating dissection classes, I have not yet found a completely dissected cadaver with less than 30 surgically significant anatomical variants visible to the naked eye. I can imagine a time when everyone has their own “anomaly identity card” gathered from total body imaging” [7]. In other words, the anatomy of each individual varies like fingerprints. Future exploration may help predict the most likely anatomical variants to be present. Research in Anatomy does not just need to be continued but advanced as per the

demands of the medical field. The deviance from typical anatomy may be critical for the operating surgeon, so the data are worth researching and publishing to supplement the available medical literature.

Future recommendations

- Planning of more critical research in anatomy as per requirement by new procedures and approaches, like detailed endoscopic anatomy
- Look over the previous research, identify the lacunae and gray areas
- Research in Molecular anatomy needs emphasis
- Evidenced-based studies should be performed.

Variations in Anatomy are endless, so need to be explored and examined. Sharp observational skill is the key to good research. So, go ahead, pick up your dissection instruments, do research, and circulate them, the scope is illimitable. To conclude anatomical research is still relevant and much needed, so it must be continued and boosted purposefully.

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Conflict of Interest

Nil.

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