

A Short Review on the Role of Radiology in the Assessment of Human Anatomy

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ABSTRACT

Personnel in diagnostic radiology are trained to assess anatomy and anatomical

anomalies on pictures attained using contemporary imaging modalities. It makes sense, then, that radiography should be heavily implemented in the instruction of anatomy since diagnostic images are purely representations of anatomy and necessitates an in-depth knowledge of anatomy.

Key Words: Radiology; Anatomy; Students

INTRODUCTION

Radiology professionals are trained to check anatomical anomalies on images taken using modern imaging modalities for diagnostic purposes. Therefore, it makes apparent that radiography teaching should be a major element of anatomy instruction. The significance of teaching anatomy is still undeniable, but there is still debate regarding how to go about it [1].

The transition in medical curriculum globally from the conventional, and basic science foundation to more clinically focused problem-based from classical teaching techniques was first advocated for in the early 1990s by the United Kingdom General Medical Council which also emphasized the degree of incorporating clinically-based teaching and problem-based learning into students medical education in support of more time spent on problem-based learning [2].

HUMAN ANATOMY

There are two groups of Anatomy examined in science; they are gross anatomy and microscopic anatomy. The survey of anatomical features that are visible to unaided vision is known as gross anatomy, frequently referred to as topographical anatomy [3]. The study of tiny anatomical structures with the use of microscope is known as microscopic anatomy. There are a few specialized areas of human anatomy, including: gross anatomy, which is the systematic or regional study of human body organs and body components; osteology and cadaveric anatomy are both parts of gross anatomy; histology and microscopic anatomy; cytology and cytogenetics, the study of cells; developmental anatomy/embryology; surface anatomy and radiological anatomy.

RADIOLOGICAL ANATOMY

The study of anatomy using radiographic films is called radioanatomy, and it is a branch of anatomy. The understanding of human anatomy meets clinical application in the field of radiological anatomy. It brings together a number of non-invasive techniques for viewing the internal body architecture [2, 4].

The three imaging modalities that are most frequently employed are magnetic resonance imaging, computed tomography, and X-rays. X-ray and CT both need the use of ionizing radiation, whereas MRI detects body protons using a magnetic field. Among the three, MRI is the safest, although each technique has advantages [5].

CONCLUSION

It is concluded that today's medical knowledge is very advanced, and as a result, radiography has advanced. Bone and visceral organs of the human body are studied using radiology or radio anatomy. As a result, radio anatomy or radio-imaging has become more practical for therapeutic use and for various researches in human anatomy such as epiphyseal fusion of bones, and bone fragments identification which is also useful in forensic medicine.

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REFERENCES

1. Ebeye OA, Okoro OG, Ikubor JE. Radiological assessment of age from epiphyseal fusion at the wrist and ankle in Southern Nigeria. *Forensic Sci Int Reports.* 2021; 3:100-164.
2. Arvind K. Importance of radiology in anatomy. *Int Ayurvedic Med J.* 2022; 2(5):111-115.
3. Agnivesha CS, Chakrapani, Gangadhar. 3rd ed. Sengupta N, editor. Varanasi. Chaukhambha Publishers. 2009.
4. Adam A, Dixon AK, Gillard JH. Grainger & Allison's Diagnostic Radiology (6th Ed.). Elsevier. 2015; 56(12):21-44.
5. Weber EC, Vilensky JA, Carmichael SW, Lee KS et al. *Netter's Concise Radiologic Anatomy* (2nd edition). Philadelphia PA Elsevier Saunder. 2014.

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