

Perception of Anatomy Knowledge Necessity in Pathology



Background

Pathology reports begin with a gross (macroscopic) description of the specimen's size, weight and appearance and the site from which it was taken.

This gross appraisal is not about "seeing" alone – it requires anatomical knowledge to map lesions to organs and guide subsequent microscopic analysis.

Our study explores whether students recognise this need.



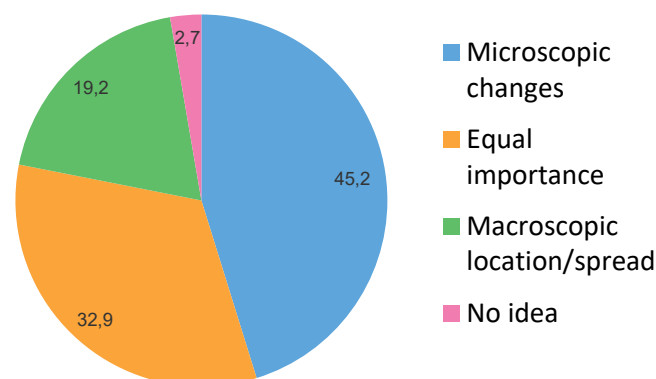
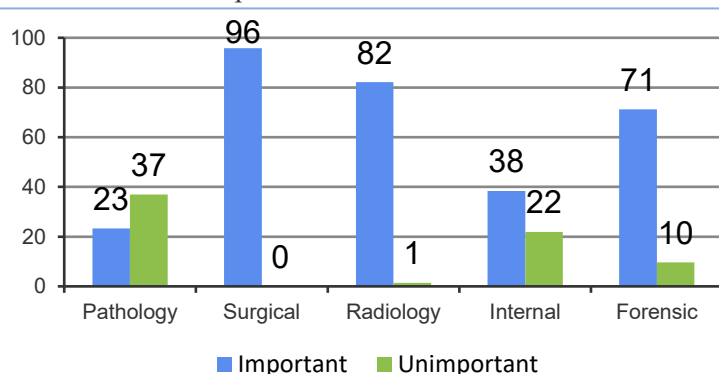
Methods

The survey consisted of 13 questions. Two of these were demographic questions, eight were Likert-type questions, and three were single-best-choice questions. Seventy-three clinical medical students volunteered to participate in the survey. The Likert-type questions explored students' perceptions of the importance of anatomy knowledge for various medical specialties. Additional closed-ended questions assessed understanding of anatomical terminology, the contribution of anatomy education to report interpretation, and whether pathology teaching altered views on macro vs microscopic emphasis.



Results

When the answers to the first five Likert-type questions were evaluated, students indicated that anatomy is essential for surgery, radiology, and forensic medicine. Scores for the importance of anatomy for internal medicine and pathology were below 40%. For internal medicine, the percentage of those who believed that anatomy was important was higher than those who believed it was unimportant. For pathology, the percentage of those who believed that anatomy was important was significantly lower than those who believed it was unimportant.



- Microscope-first: 45.2% of students see microscopic changes as the starting point of a pathological process, versus 19.2% for macroscopic spread, while 32.9% judge both equally fundamental (2.7% unsure).
- 72.6% agreed that they understand anatomical terminology in pathology reports; 11.0% disagreed.
- 44.4% felt anatomy classes enhanced their ability to read reports; 20.9% did not.
- After pathology teaching, 39.7% still saw pathology as mainly microscopic; 23.3% newly acknowledged macroscopy's importance; 20.5% already valued macro-micro equally; 4.1% reversed from macro to micro emphasis; 12.4% fell into other shifts.



Conclusion

Gross examination is the unseen foundation of pathology: accurate descriptions depend on anatomical competence rather than simple visual inspection.

Our survey reveals that many students underestimate anatomy's role in pathology. It would be beneficial if macroscopic–microscopic links integrate curriculum early and emphasise that macroscopic sets the stage for precise microscopic diagnosis.

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