

Integrative physiology: the integumentary system.

MCFADYEN, M.C.E. and WATSON, E.

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INTEGRATIVE PHYSIOLOGY: THE INTEGUMENTARY SYSTEM

SCHOOL OF PHARMACY & LIFE SCIENCES

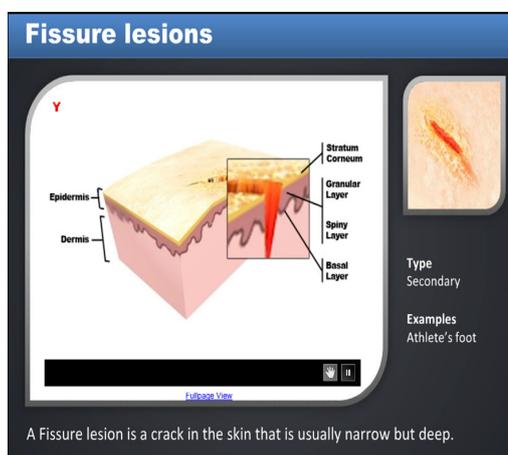
SITUATION

The integumentary system is the first line of defence in the body and part of the innate immune system. Within a first year module on Integrative Physiology several software tools were used to support both lecture and coursework material for the immune and integumentary systems. However, students had difficulty visualizing the various layers of the skin and how they become affected by different skin lesions. To assist student learning, discussion with the e-learning team arose with the aim to provide a virtual 'prop' detailing differences between skin lesions.



ACTIVITY

Articulate™ Engage and Quizmarker software were used as a Framework to develop a 3-dimensional virtual arm. Open source software was used to highlight areas of a virtual arm which illustrated a primary or a secondary skin lesion and were raised out of the arm when highlighted. This allowed students to manipulate the area under review and to identify the specific skin layers involved. As students learn in different ways Dr McFadyen recorded a voice over for the presentation. Prior to engaging with the 'virtual arm' clear and concise instruction for using the presentation were provided. To ensure students had the opportunity to assess their learning they were provided with appropriate feedback and a quiz evolved including 'fun' tasks such as a sequence, spell and visual test. If a student achieved a correct answer they were immediately rewarded with a 'round of applause' gaining many smiles from the students. The students score was still provided at the end of the quiz together with the pass rate of 80%.



WHAT

Development of 3 dimensional e-learning software package

WHO

Morag CE McFadyen; Ed Watson

KEYWORDS

e-learning; skin; first line of defence;

RESOURCES

Prezi demo:
<http://tinyurl.com/cmxyuk6>



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IMPACT

Verbal comments from students indicate an overall more positive learning experience. Logs of repeated attempts by the students were captured from the virtual learning environment, with students reporting an increased rate of understanding over the topic at the time of examinations.

Plans are in place to publish details on the development process used during the creation stages and the material's effect on student understanding of the topics demonstrated.

REFLECTIONS

This interactive resource was presented at the University e-learning forum as an example of best practice resulting in colleagues from other Schools showing considerable interest in our e-learning resource. Discussions are underway to develop a proposal and seek funding to build this resource into an interprofessional learning package on skin and wound care. Possibilities could include allowing NHS Grampian staff access as an educational tool for the wide variety of staff involved in wound care.

ACKNOWLEDGEMENTS

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