

WEB-BASED EDUCATION IN EMERGENCY MEDICINE: DEVELOPING AN EMERGENCY MEDICINE RADIOLOGY IMAGE LIBRARY

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Summary: This digital radiology image library is intended for Emergency Medicine (EM) trainees (clerks, residents, nurses, paramedics or fellows), EM faculty (teachers or educators), and distance learners in rural settings. This presentation is beneficial to participants who are interested in setting up a similar clinical image library using a database approach (PHP and mySQL) as a backbone with online posting and editing capabilities. Although there are multiple radiology websites, the images are not in accordance to the Royal College of Physicians and Surgeons (RCPS) EM curriculum, have unreliable quality, nor do they have the potential to be expanded into a sophisticated educational and evaluation tool for the RCPS EM program. Through the development of this EM radiology library at University of Toronto, our team has fostered collaboration among faculty members from different background (EM, radiology, computer science) across the city.

Introduction: A needs assessment was carried among University of Toronto's (UT) emergency medicine (EM) faculty members and residents. This survey revealed more than two-thirds of residents and faculty members felt that current radiology education resources were inadequate. Nine out of ten of those surveyed would use an electronic educational resource. Therefore, a web-based digital radiology library was created using SHSC radiology images in accordance to the hospital's privacy policy. The images were organized according to the RCPS EM curriculum. The users can peruse the images via a user-friendly anatomical interface or via structured menus. With respect to evaluation, these posted images are used in the quarterly resident exams. The faculty members could rate the images as per the quality and relevance to the clinical practice. Therefore this online image library provides a tool to evaluate resident performance, and ensure fairness and quality for images used in the examinations. Currently this site is for local use at the University of Toronto EM program for evaluation purposes but this site could be shared in the future with the online academic community at large. Future directions for this online image library will be to provide linkages to relevant websites, journal articles, or computer-generated quizzes. Moreover, this library could expand to include digital images, or videos to illustrate procedural skills.

Web address <http://rad.utorontoeit.com/>

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