One Night in the ED

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Abstract Radiology 2.0: One Night in the ED is an app that presents users with scrollable CT images for common scenarios found in any Emergency Department (ED). A great tool for a junior resident before starting call, it allows the user to build confidence by experiencing a simulated environment of viewing all images of a case in real time, rather than being shown screenshots of an abnormality. This can easily be used as one of many resources to prepare residents to spend a night (or more) in the ED.

Keywords Computed tomography · Education · Medical · Emergency radiology · Internship and residency · Teaching

Information

Title: One Night in the ED
Reviewer: Ian R. Drexler, MD, MBA
Reviewer Disclosure: None
Reviewer Contact Email: ird7002@nyp.org
Review Date: January 17, 2015

App Specs

App Icon URL: <http://a5.mzstatic.com/us/r30/Purple/v4/05/20/9d/05209d0b-7d57-9b86-4d74-869bc7de4bd5/icon175x175.jpeg>
App Name: Radiology 2.0: One Night in the ED
App Developer: Daniel Cornfeld

App Developer Web site: <http://radiology.cornfeld.org>
App Price: Free
Apple App Store URL: <https://itunes.apple.com/us/app/radiology-2.0-one-nightin/id397926581?mt=8>
Google Play Store URL: N/A
Category: Educational

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Fig. 1 Home screen

Tags: #educational #free #radiology #works-offline #iOS-only
 Works Offline: Y
 FDA approval: N/A
 Promotion Code: N/A
 # Quick Review
 Overall Rating: 4.5
 Content: 4
 Usability: 5
 Pros: Classic Cases Involving Common ED Complaints, Easy to Navigate, Free
 Cons: Only Covers Body Imaging Using CT Images
 # Full Review

Intro

Radiology training programs struggle on how to prepare their residents to take call in the Emergency Department. Many programs use the ED core curricula and tests to help gauge whether residents are prepared. The app attempts to simulate the real-world environment of reading CTs in the

ED by showing cases that one might expect on a typical night in the ED.

Purpose/Features/Content

The app was created as a set of teaching files to educate radiologists preparing for call, as well as for medical students and other physicians interested in learning how to interpret CT images (Fig. 1). It consists of 65 cases based on body CT imaging (Fig. 2). Topics covered include those one could expect to find in any busy ED: bowel obstruction, appendicitis, diverticulitis, pancreatitis, pyelonephritis, cholecystitis, renal obstruction, ischemic bowel, and trauma. Users have the option of taking the cases as unknowns or choosing cases based on the topics covered.

With each case, users scroll through axial CT images on soft tissue windows (Fig. 3). A brief history is provided at the bottom of the screen. Once done reviewing the images, the user can view a discussion, which includes a complete explanation of the findings (Fig. 4). In addition, within this discussion, there are hyperlinks

Fig. 2 Unknown case user interface

Fig. 3 Sample case

Fig. 4 Sample discussion

to annotated screenshots that show the most salient features of every case (Fig. 5).

Usability

The program is easy to navigate. Scrolling through CT images is seamless, without lag in either direction. It is easy to switch between viewing cases as unknowns or by topic.

Good

The app has high-quality axial images of common ED cases. The user interface is intuitive, and the app is easy to navigate. Discussions are well written and even include incidental findings. Hyperlinks to annotated screenshots of

Fig. 5 Sample annotations

key findings are helpful in explaining the findings. Every topic covered is relevant for any radiology resident preparing to take call in the ED.

Room for Improvement

While the program does an excellent job covering acute chest and abdominopelvic illnesses, it could even be better if it included other areas, such as neuroradiology or musculoskeletal radiology. Also, it would be helpful to have some plain film or MRI cases. That being said, it does a great job at what it was made for, and if people take this for what it is—an app that presents you with real-world CT images of common ED scenarios—and supplement it with other resources, it will represent a valuable program.

Similar Apps

Radiopaedia (<https://itunes.apple.com/us/app/radiopaedia/id473157176>)