Title
Emergency Radiology: Developing a Curriculum to Improve Competency in Radiograph Interpretation

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Authors
Calandrella, C
Yoneda, N

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Introduction: Interpretation of radiological images such as X-Rays and Ct scans is an essential skill for the emergency physician (EP). Despite the importance of this skill, a standardized curriculum regarding the education of radiographic imaging does not exist.

Educational Objectives: In recognition of the importance of Plain film and CT scan image interpretation to the clinical practice of emergency medicine, we proposed to develop a curriculum for radiographic competency

1. Develop a didactic education program where residents interact with faculty to improve their interpretation of images.
2. Use of radiology department to facilitate the education of residents.
3. Interpretation and utilization of the appropriate available radiological modality.
4. Administer an annual exam to monitor progress of each resident’s skill.

Curricular Design: Utilizing a list of radiographic diagnosis that is used by Radiology residents training in Emergency Radiology, we developed a curriculum to educate Emergency Medicine residents for plain film and CT scans. Nine hours of didactic time is allotted to radiology education each year. Lectures are conducted in a traditional didactic lesson for the first thirty minutes and then concluded with a Socratic approach led by a radiologist that explains the methods of reading each modality and then reviewing pertinent cases together as a group.

Impact: In 2011, residents were provided with a survey using a Likert scale to determine their satisfaction with radiology education prior to instituting a specific curriculum. They were polled again in 2013 to determine the effectiveness of a radiology course. Initially, only 66% of residents were satisfied with their radiology education and 90% felt it was important to have dedicated radiology education where 60% spent less than 5 hours independently studying radiology. After 2 years, 87% of residents felt improved satisfaction regarding radiology education with use of a curriculum.
Figure 1. Are you satisfied with the current radiology content covered in conference lectures? (Data from 2011)

Figure 2. Are you satisfied with the current radiology content covered in conference lectures? (Data from 2013)

Figure 3. Do you think it is important to have a dedicated radiology curriculum incorporated during your Emergency Medicine education? (Data from 2011)