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APPH 226 Apparatus and Image Management Reflection - forms part of the quiz (5%)

Reflection: Collimation of the X-ray Beam

Reflections are designed to encourage you to think critically about your experiences, apply theoretical knowledge to practical situations, and develop your professional identity as a medical imaging technologist.

Topic: Collimation of the X-ray Beam

1. What is collimation in medical imaging, and why is it used?
   Collimation in medical imaging is used to help minimize radiation dose to the patient by sparing the tissue from unnecessary radiation exposer, by narrowing the x-ray beam to the area of interest. Collimation improves radiographic image quality by reducing scatter radiation, helps enhance contrast and sharpness into the x-ray image. It also helps protect our patient's health by less radiation induced effects specially in repeated images or in children who are more sensitive to radiation.

2. How does proper collimation benefit both the patient and the quality of the X-ray image?

Having proper collimations helps benefit both patient and quality of the image by limiting the x ray beam to the areas of interest by reducing the scattered radiation and improving the image contrast.

Word count: 250-350 words

Reflective Writing Rubric

Criteria	1 Point	2 Points	3 Points
Critical Reflection	Basic understanding of topic	Some reflection, with basic analysis	Deep reflection with thoughtful analysis
Application to Practice	Limited connection to medical imaging practice	Clear connections to medical imaging practice	Insightful application to medical imaging practice
Writing Quality	Basic writing with some clarity issues	Clear writing with minor errors	Well-written, clear, and concise

