

A Picture is Worth a Thousand Words

Anthony D; Cymbor S; Cata J; Abdelmalak B

Cleveland Clinic Foundation, Cleveland, Ohio

Learner audience: New CA-1 Residents Orienting to the Operating Rooms

Needs Assessment: A traditional Problem Based Learning (PBL) and/or lecture-based curriculum may be inadequate for teaching certain concepts to Anesthesiology residents. This can be improved by incorporating visual images into PBL case discussions.

Curriculum: While a PBL curriculum is useful for presenting many topics in the field of anesthesiology, it may be suboptimal for discussing certain aspects of anesthetic practice. However, these subjects can be better learned with the assistance of visual images. For example, teaching procedures, technical skills, and working with equipment can be enhanced by using associated pictures. The specific topic that our program focused on was anesthesia machine setup and checkout. The junior residents typically hear a lecture about this topic and set-up operating rooms, then participate in a PBL to discuss it further.. It was our premise that pictures of machines provide a more lasting impression on residents and improve understanding of proper machine setup.

Our new PBL for Anesthesia Machine Setup used hard copies of digital photographs of anesthesia machine setups. Pictures of anesthesia machines with proper and improper equipment setups were distributed to group participants. It was the task of the individual to identify errors in machine setup in a particular photograph. The group, guided by the moderator then reviewed different responses and whether or not the errors contained within the pictures had been correctly identified. The advantage of this technique is that it allows educators to immediately assess the resident's ability to identify equipment errors, it closely mimics operating room conditions, and the group discussion enforces the concepts and the implications of proper anesthesia machine checkout.

Impact: The addition of pictures to this PBL topic received unanimous favorable reviews from group participants. Furthermore, residents requested more images to be incorporated into future PBL topics. Previous research has demonstrated the benefit of visual images in teaching and learning. Our approach is a basic means to include visual images in a PBL discussion to maximize resident learning.