

## AbstractID: 14422 Title: Gamma Camera and SPECT Routine Quality Assurance Testing

Routine quality control, calibration and performance testing of gamma cameras are necessary in order to consistently acquire good quality images without artifacts. This lecture will briefly cover the basics of gamma camera image formation and performance characteristics. The lecture will primarily focus on routine quality assurance tests for gamma cameras.

It is increasingly common for providers of nuclear medicine imaging services to seek accreditation, either from the American College of Radiology (ACR) or the International Commission for Accreditation of Nuclear Medicine Laboratories (ICANL). Both accrediting bodies recommend routine quality control tests and these tests will be discussed.

Common problems and image artifacts will be discussed as well as how to correct these problems. Calibration procedures such as center of rotation and uniformity calibration will be discussed.

### Learning Objectives:

1. Learn the basics of gamma camera and SPECT performance measurements and quality assurance test procedures.
2. Become familiar with routine quality control tests recommended by accreditation programs.
3. Be able to identify and correct common problems and image artifacts in gamma camera and SPECT imaging.