Cardiac SPECT vs CT coronary angiography

Seok Tae Lim, M.D.

Department of Nuclear Medicine, Chonbuk National University Medical School and Hospital, Jeonju, Korea

Imaging of myocardial ischemia

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Quantitated gated SPECT

- Perfusion quantification
  - 3D sampling
  - Normal limit
  - Polar map
- Function quantification
  - Surface detection
  - Volumes
  - Motion/Thickening

Integrated analysis

Hx of cardiac CT

<table>
<thead>
<tr>
<th>Year</th>
<th>DSCT</th>
<th>HSCT</th>
<th>LSCT</th>
<th>2005-6</th>
<th>2007-8</th>
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Physics of CTA

- Temporal resolution
  - Gantry rotation time
  - Acquisition mode
  - Type of image reconstruction
  - Pitch
- Spatial resolution
- Contrast resolution

Acquisition mode