

WHAT ASNC MEMBERS
NEED TO KNOW ABOUT

Coding

Basic Coding Guidance for Billing Gated Blood Pool Studies

Q: What is Gated Blood Pool imaging?

A: Gated Blood Pool (GBP) imaging, which is also referred to as multi-gated acquisition (MUGA) or radionuclide ventriculogram (RVG), assesses regional and global left and right ventricular size and function.

Q: What are the types of Gated Blood Pool studies?

A: GBP studies can be divided into two types: first-pass studies and equilibrium studies. Both first-pass studies and gated equilibrium studies provide similar information on ventricular function (ejection fraction) and each has particular advantages and disadvantages. The choice is dictated by the instrumentation available, the clinical setting, radiopharmaceutical selection, and physician experience and preference. The two techniques differ in the data acquisition, patient preparation, equipment, data analysis, and interpretation.

Q: What are the different techniques used for GBP equilibrium and first-pass studies?

A: The gated equilibrium technique requires ECG leads and equipment monitors linked to the camera for data collection where the ECG signal is used to initiate the data collection cycle with the camera. After the tracer has equilibrated in the blood pool (typically 10 minutes after administration), data are recorded in synchrony with the patient's heartbeat. The first-pass technique for GBP imaging utilizes only the initial transit (flow) of the bolus injection of the radiopharmaceutical as it passes through the heart.

Q: Which CPT codes should be used when describing GBP equilibrium studies?

A: 78472: Cardiac blood pool imaging, gated equilibrium; planar, single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing
(For assessment of right ventricular ejection fraction by first-pass technique, use 78496)

In 2007, ASNC has covered basic coding guidance for billing MPI SPECT, myocardial PET perfusion imaging, and cardiac CT studies in this column. This month's column discusses appropriate coding and billing for Gated Blood Pool studies.

78473: Cardiac blood pool imaging, gated equilibrium; multiple studies, wall motion study plus ejection fraction, at rest and stress (exercise and/or pharmacologic), with or without additional quantification

78494: Cardiac blood pool imaging, gated equilibrium, SPECT, at rest, wall motion study plus ejection fraction, with or without quantitative processing

78496: Cardiac blood pool imaging, gated equilibrium, single study, at rest, with right ventricular ejection fraction by first-pass technique (List separately in addition to code for primary procedure)
(Use 78496 in conjunction with code 78472)

Q: Which Healthcare Common Procedure Coding System (HCPCS) Level II drug codes for pharmacological stress agents are most frequently used in conjunction with GBP studies?

A: J0152: Injection, adenosine for diagnostic use, 30 mg

J1245: Injection, dipyridamole, per 10 mg

J1250: Injection, dobutamine hydrochloride, per 250 mg

Clinical Case A

Clinical Data: Breast Cancer – Evaluate EF.

Method:

The patient received an intravenous injection of 24.2 mCi of Tc-99m labeled red blood cells and resting gated blood pool images of the heart were acquired.

Findings:

The heart size is normal. Gated images reveal normal motion in all regions with a computed left ventricular ejection fraction of 48%.

How to Code Clinical Case A

CPT or HCPCS Code	Number of Units	Description
78472	1	GBP, Planar, Single (No mention of SPECT or First-pass therefore default to Planar and Equilibrium study)
A9560	1	99mTc labeled Red Blood Cells, per study dose

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