Division of Nuclear Medicine Procedure / Protocol

SALIVOGRAM
UPDATED: APRIL 2011

CPT CODE: 78258

Indications: This study is performed on neonates, infants, and children to determine if there is evidence of pulmonary aspiration of saliva that might explain recurrent pneumonias.

Patient Prep: The patient must arrive fasted for 4 hours. With formula feeding, the suggested schedule time is 1 hour before the next expected feed.

Scheduling: Imaging time is 1 hour, with delayed images at 2 hours for 30 minutes.

Radiopharmaceutical & Dose: Tc-99m-Sulfur Colloid 1 mCi +/- 20% (0.8-1.2 mCi). Dose will be adjusted for patient weight per nomogram or NMIS. Dose is instilled into the mouth in a small volume (0.1 ml) via a syringe. The tracer should be placed on or near the base of the tongue.

Imaging Device: Gamma camera with LEHR collimation.

Data Acquisition: With the patient supine (on gamma camera if infant), anterior images should be obtained in 1-minute 128 x 128 frames for 1 hour. At 2 hours after initial imaging, a 5-min image with transmission image should be obtained.

Data Analysis: A cine should be constructed, along with screen capture of 5-minute frames for both early and delayed image sets. The images should be displayed at normalized intensity and increased intensity to detect small foci of tracer.

PACS: All images should be sent to PACS including raw images and save sets.

Interpretation: In the first part of the study there should be only evidence of oral, esophageal, and gastric tracer with no pulmonary activity. Pulmonary activity indicates aspiration. Abnormal scans show tracer localization in the trachea, bronchi, and lungs.

Comments: A Nuclear Medicine staff or resident physician should be consulted to determine if additional views are indicated.

Reviewed By: S. Perlman, D. Fuerbringer, S. Knishka

Scott B. Perlman, MD, MS
Chief, Nuclear Medicine

Derek Fuerbringer, CNMT
Manager, Nuclear Medicine

Scott Knishka, RPh, BCNP
Radiopharmacist