Radioembolization (Y90)

Overview

- Treat liver cancer
- The use of fluoroscopic systems for interventional purposes is restricted to radiologists and individuals to whom a physician has delegated authority pursuant to the Occupations Code, Chapter 601, and the applicable rules of the Texas Medical Board.

Indications

- Liver cancer

Examination Time

- 2 hours

Patient Preparation

- Labs completed within one month of procedure
- Nothing to eat or drink 4 hours before procedure
- Stop blood thinners 5 days before procedure
- Obtain informed consent
- Question for allergies

Equipment

- Siemens C-arm
- Sterile pack
- Omnipaque 300
- Various catheters and wires
Radioembolization (Y90)

- Power injector
- Yttrium-90 calculated dose
- Therasphere delivery apparatus

Patient Position & Imaging Field
- Supine

Acquisition Protocol - Routine Study
- Radiologist performs fluoroscopy and acquires images

Data Processing
- Technologist will send images taken to PACS (Picture Archiving and Communication System).
- Technologist will enter Dose Area Product in the appropriate field of RIS (Radiology Information System).
- Technologist will enter Fluoro Time and SEE (Skin Entrance Exposure) into the technologist notes field of the RIS.

Radiation Exposure levels
- Recommended operator guidance reference level for this fluoroscopically-guided interventional procedure is 90 minutes beam-on time. Threshold reference level is a SEE of 5 Gy (Gray).
- Radiation Exposure levels are monitored through the Austin Radiological Association’s monthly technologist QA process.
- If the reference level is exceeded, further analysis will be performed by the Protocol Committee and appropriate action taken to include possible patient follow-up.

Protocol Review
- Not to exceed 14 months.
  Reviewed and Revised: March 13, 2020, Reviewed February 5, 2021