Name of Policy: Agitated Saline Contrast Echo
Policy Number: 3364-106-E08

Approving Officer: Chief Executive Officer-UTMC
Responsible Agent: Director of Cardiovascular Services
Original effective date: 9/2003

Scope: University of Toledo Medical Center

Key words: Echo, Echocardiography, Saline, Protocol, Contrast

New policy proposal
Minor/technical revision of existing policy
Major revision of existing policy
Reaffirmation of existing policy

(A) Policy Statement

The Echo Lab provides agitated saline contrast injections for assessment of intra cardiac shunts and to assess right sided pressures.

(B) Purpose of Policy

To provide criteria for using agitated saline on patients requiring this contrast.

(C) Procedure

Criteria for Agitated Saline Contrast Usage:

Basic criteria may include, but not limited to, the following:

- 1. Echocardiogram If the right side (right atrium or right ventricle) is moderately enlarged without clinical reason stated in the order.
- 2. If the patient has the diagnosis of pulmonary hypertension and you are unable to obtain right sided pressures.
- 3. If a congenital abnormality is suspected.
- 4. If abnormal Doppler flow is suspected, and agitated saline is needed to document a cardiac shunt.
- 5. If a Transesophageal Echocardiogram or Echocardiogram is ordered to rule out source of emboli, saline injection is needed to assess for patent foreman ovale.

Protocol

If the criteria for Agitated Saline use is met as mentioned above, the following will be implemented:

- 1. The sonographer or physician will assess the need for Agitated Saline in compliance with the procedure.
- 2. The RN, Nuclear Technologist or Sonographer should be contacted to start the IV if needed.
- 3. Use 10cc agitated saline in a 3-way stopcock with an empty 10cc syringe. The RN, physician, or Sonographer will inject the saline. Multiple injections (usually 2-4) with and without valsalva will be performed.

Approved by: **Policies Superseded by This Policy:** • None /s/Initial effective date: 9/2003 Todd Korzec, RN, BSN Director, Cardiovascular Services Review/Revision Date: 5/04 1/31/2025 5/07 1/09 Date 8/25/2010 6/2013 $/_{\rm S}/$ 3/2016 3/2019 Samer J. Khouri MD 3/2022 Medical Director, Non-Invasive 7/23 Cardiac Imaging 3/24/2025 3/7/2025 Next review date: 3/24/2028 Date $/_{S}/$ Christine Stesney-Ridenour, FACHE Chief Operating Officer 3/24/2025 Date Review/Revision Completed by: Director, Cardiovascular Services