Sedation and Analgesia in IR

Notes of Interest:

Best practice for many interventional radiology procedures requires pre/peri procedural sedation or analgesia. Basic IR Sedation techniques involves competency training, appropriate safety equipment and proper monitoring: The 2010 ACR-SIR guidelines for sedation/analgesia defines moderate sedation as “a minimally depressed level of consciousness induced by the administration of pharmacological agents in which the patient retains a consciousness and independent ability to maintain protective reflexes and a patent airway and to be aroused by physical or verbal stimulation”.

IR Radiologists and support staff require specialized competency in the administration of moderate sedation medications as well as the care required prior to, during and post administration of those agents. Many institutions have specific policies on the administration abilities of personnel such as having an RN with a Specialized Clinical Competency in direct IV administration of certain medications. The 2010 ACR-SIR guidelines for sedation/analgesia indicate that qualified personal “other than the practitioner performing the procedure, must be present to monitor the patient throughout procedures performed with sedation/analgesia.”

 Moderate sedation in IR may be utilized in various situation such as:

- To relieve patient anxiety
- Pain or discomfort during procedure
- To facilitate the imaging service where motion and patient cooperation is crucial for procedure accuracy.

Routes of administration: for most IR procedures the direct IV route is utilized, which means the effects are immediate and generally of shorter duration.

Safety support must be in place to assist with emergency situations as they arise. Safety support may include:

- Oxygen, reversal agents, resuscitation equipment, and quick access to ACLS trained staff for resuscitation if required.
- Qualified IR staff to monitor and treat patient response to medications (Oxygen saturation, pulse and blood pressure and respiratory rate.) Please see your institutions guidelines for specific requirements.

The practice guidelines For sedation and analgesia by non anesthesiologist article published in 2002 by the American society of anesthesiologists provides examples of guidelines for discharge of patients post moderate sedation including expectations and assessment parameters.

Article Reference Links:


Catherine Tuite, M.D. and Eric J. Rosenberg, M.D. Sedation and Analgesia in Interventional Radiology Seminars in Interventional Radiology v.22(2); 114-120 Jun 2005 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3036269/