Improving Preparedness for Anaphylaxis Management in Pediatric Radiology

Suite: A Radiology- Anesthesiology Quality Improvement Collaborative

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Purpose

• Radiographic contrast agents are routinely administered for diagnostic imaging procedures such as CT and MRI.
• Life-threatening anaphylaxis/anaphylactoid reactions can occur with these agents.
• This study was designed to assess the preparedness of radiologists, radiology nurses and technologists in managing anaphylaxis-related emergency situations until the hospital code team arrives.
• Objective of this study was to identify areas of perceived deficiencies in knowledge and clinical experience and to improve staff education and confidence with the introduction of simulation training and the use of crisis management cognitive aids in the radiology suite.

Methods

• We conducted a survey (Survey Monkey®) of pediatric radiologists, radiology nurses and technologists at Lucile Packard Children’s Hospital (LPCH).
• Survey was designed to assess their experience with anaphylaxis and their confidence in managing such reactions.
• We also asked about the potential utility of learning resources like simulation training, refresher lectures and use of cognitive aids to improve clinical performance in such a crisis.

Results

• 33 people responded to the survey.
• 45% of the respondents had never encountered anaphylaxis.
• 40% felt little or no confidence in leading resuscitation.
• 82% respondents expressed interest in regular simulation sessions to practice anaphylaxis scenario.
• A few respondents also suggested that an anaphylaxis management protocol be displayed in the radiology suite.

Discussion

• Crisis resource management, simulation training, and use of cognitive aids are integral parts of anesthesia training and practice.
• With this ongoing initiative we are developing the use of these resources in the radiology department to enhance patient safety.
• As a result of this project, anaphylaxis checklist are displayed at CT scan and MRI scan locations and radiology staff will be undergoing regular simulation training.

References