“At Your Wits End”: Methods to Decrease Patient Anxiety during Emergency Imaging Procedures

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PURPOSE

We aim to discuss strategies to decrease patient anxiety during emergency radiology studies to increase the likelihood of compliance, optimize quality of imaging, and increase the success of interventional procedures.

BACKGROUND

Emergent radiologic exams are crucial to expeditiously identify regions of clinical concern that require prompt attention and possible intervention.

Periprocedural anxiety is a major cause of morbidity, especially for interventional radiology procedures that often utilize conscious sedation via pharmacologic agents. Further, there are associated increased risk of adverse events with over-sedation. Moreover, newer noninvasive strategies are better equipped to address patient anxiety.

METHOD

Patients who present to the emergency room have high anxiety. Research shows that high level of anxiety is present in about 91% of patients awaiting radiologic exams. Physiologic changes include elevated heart rate and blood pressure by up to 30% for patients undergoing MR imaging.

Stress can also have an impact on patient outcomes, reflecting in complications, discrepancies in diagnosis, and possible delay in treatment.

We discuss methods to decrease anxiety including empathic attention, meditation, anodyne imagery, music, video glasses, and mobile applications.

Results

Strategies to mitigate patient anxiety during emergency radiology studies:

Empathic Attention	• Build rapport by greeting patient, maintaining a clean/quiet holding area, and providing clear concise preprocedural expectations. • Matching involves fine-tuning body language and speech to the patient’s preference. It is crucial to provide a perception of patient’s control and promptly responding to their requests.
Hypnosis	• Through guided techniques consisting of verbal repetition and breathing exercises, the patient is more susceptible to suggestion while maintaining a sense of his/her reality. • Uncomfortable or negative stimuli are encouraged to be described with neutral or positive sensations.
Anodyne Imagery	• Interactive guided imagery that emphasizes relaxation, focused concentration, and enhancement of positive imagery. • Involves deep breathing exercises, guided muscle contraction/relaxation, patient describing vivid imagery of physical location. Negative feelings are transmuted into a concrete image and reconstructed to positive imagery.
Music	• Patient-selected music mitigate pre- and peri-procedural anxiety while reducing sensation of pain. • Music therapy reduces post-procedural anxiety and attenuates physiologic parameters like heart rate, blood pressure, and post-operative pain.
Video Glasses	• Lightweight hands-free video glasses in clinical and procedural settings distract patients and reduce anxiety and stress. • Not only are they effective in safely lowering patient anxiety, but also did not hinder the responsibilities of medical teams.
Mobile Applications	• Audiovisual distractions decrease stress in patients undergoing procedures. • Specifically tailored web-based applications involve emphasizing components most relevant to the specific intervention. Not only does this reduce levels of anxiety but also serves to educate patients regarding their procedure.

A multitude of strategies are available to clinical teams to reduce patient anxiety during emergency imaging procedures.

Building positive rapport and making the patient feel heard with their concerns/questions adequately addressed decreases anxiety.

Guided relaxation techniques and audiovisual tools not only reduce anxiety but also serve as an excellent educational tool.

CONCLUSION

Personalized care is paramount in a rapidly evolving healthcare climate. Each patient is unique, and their anxiety levels vary. Tailoring the approach to the individual's needs and preferences is essential to reduce anxiety, and increase compliance, thereby improving interventional success. By creating a supportive and empathetic environment, patients can feel more comfortable and reduce anxiety during emergency radiology exams.

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