

MSAS22

Safety Standards in MR-Getting More Safety ROI for Your MRI (Sponsored by the Associated Sciences Consortium) (An Interactive Session)

Monday, Nov. 28 10:30AM - 12:00PM Room: S105AB

MR **SQ**

AMA PRA Category 1 Credits™: 1.50

ARRT Category A+ Credits: 1.50

Kendra Huber, RT, BS, Castle Rock, CO (*Moderator*) Nothing to DiscloseDana Aragon, RT, Albuquerque, NM (*Moderator*) Nothing to Disclose**Sub-Events****MSAS22A Implementation of MR Safety in a Clinical Setting**Vera Kimbrell, Mendon, MA, (vkimbrell@partners.org) (*Presenter*) Nothing to Disclose**LEARNING OBJECTIVES**

1) Give the audience an understanding of the key safety elements involved in MR center operations. 2) Provide a working knowledge of the components needed for designing a successful Safety program. 3) Demonstrate and explain how a busy MR center can maintain safety and still be efficient. 4) Leave the audience with the ability to translate this lecture to the workplace and make good safety decisions for the staff and patients to whom we provide care.

ABSTRACT

MRI Safety and the need for a comprehensive plan to address this issue have grown to encompass new roles and responsibilities in a Radiology Department. Defining the roles and responsibilities for these tasks makes the process manageable and leads to a better patient outcome and overall quality of your MR process. The first step is to take a fresh look at your physical layout, policies, procedures, forms and educational plan. The progress of technology both in MR and medicine as a whole have added both enhanced tools and new problems to MR staff over the last 5-10 years. MR technologist and support staff is now seeing an upswing of new implants and more patients that have these devices implanted. There are constantly changing trends in fashion and body art coming into MR centers every day. Balancing the need to safely scan each patient with demands for increased thru put can be challenging, stressful and lead to staff burn out and potential accidents. Many MR professionals have studied, written papers and lectured on how to design, implement and control MR Safety in a busy department. The challenges we face aren't new but are more frequent and come in differing levels of complexity. In this lecture we will focus on the roles of individuals and how to ensure your staff has the skill set to address the changing landscape in MR safety today. Tools available include Physics support, updated screening forms and ancillary devices like ferrous metal detectors and wands. The need for a somewhat consistent process across the world goes a long way in ensuring we maintain patient safety while also scanning patients who need this service. Do you need extra staff to accomplish these goals? The answer will vary from site to site and only you and your staff can make this determination. Education is vital and necessary at every level of responsibility in MR. Safety related education should be the focus for all MR technologist and ancillary staff members. Policy should be directed at minimizing the risks and empowering Technologist and MDs to make decisions based on knowledge and understanding.

MSAS22B Non-clinical, Non-research MRI

Scott B. Reeder, MD, PhD, Madison, WI (*Presenter*) Institutional research support, General Electric Company Institutional research support, Bracco Group

LEARNING OBJECTIVES

1) Understand what constitutes non-clinical, non-research MRI, and the distinctions from clinical and research MRI activities. 2) Understand the need for procedures surrounding non-clinical, non-research activities. 3) Understand the basic principles that should be considered when approaching non-clinical, non-research MRI activities.

ABSTRACT

Magnetic resonance imaging (MRI) of human subjects is widely performed for clinical and research purposes. Clinical MRI requires a physician order, while research MRI typically requires an approved protocol from a local institutional review board (IRB), as well as informed consent. However, there are several circumstances in which it is appropriate to perform MRI in human subjects, that constitute neither clinical nor research activities. Examples include clinical protocol development, training and teaching, and quality assurance testing. We refer to such activities as non-clinical, non-research MRI. The purpose of this talk is to provide an overview of principles and guidelines for appropriate and safe use of MRI in human subjects for non-clinical, non-research purposes.

MSAS22C The Role of the MR Safety Expert (MSRE) in MR Safety Programs

David W. Jordan, PhD, Cleveland, OH, (david.jordan@uhhospitals.org) (*Presenter*) Consultant, Petrone Associates, LLC; Consultant, Applied Medical Physics in Radiology, Inc; Advisory Board, Medical Technology Management Institute; Director, Medical Technology Management Institute; Speaker, Medical Technology Management Institute; Travel support, Sectra AB;

LEARNING OBJECTIVES

1) Describe the certification process and requirements for MR Safety Experts (MRSE). 2) Explain the role of the MRSE in the MRI safety program, relative to the MRI Medical Director, MR Safety Officer, and other staff members. 3) Identify improvement opportunities for consultation with an MRSE in their own clinical practice.

ABSTRACT

Advances in MRI and implantable medical devices have created unprecedented opportunities for sophisticated MRI exams to guide

and improve patient care while introducing significant safety challenges. Equipment and device manufacturers have responded by providing detailed technical safety information for their products, but integrating this information and evaluating the safety of a given case or situation is difficult. To assist MR Medical Directors and MRI technologists in making safety decisions, the American Board of MR Safety (ABMRS) has created certification for the MR Safety Expert (MRSE): a clinical scientist