RCBI MRI Safety Policies & Procedures
7/15/08

Training
Before conducting research using the MRI, all study personnel who will be present during the MRI study must take and pass the RCBI MRI Safety course. This includes viewing a video, reading the RCBI Safety Policies & Procedures, MRI Safety Issues, Emergency Procedures and taking a test. Once this is completed you may apply for card access to the control room and you may then start scheduling study participants. The MRI technologist will provide contacts and further information on scheduling.

Screening Policies

All persons (including the study participant, parents, attendants, etc) entering the MRI scan room must undergo a safety screening by the MRI technologist or other authorized personnel. Each person entering the room should fill out an RCBI MRI Screening Form, and the person operating the scanner must confirm their responses verbally. Copies of the Screening Form can be found on the shelves at the rear of the console room, or downloaded from the RCBI website. Screening of study participants must be done just prior to entering the magnet room, even if they were previously scanned and the form is on file. Only after the operator of the magnet has done the final screening will the participant be allowed to enter the magnet room.

You MUST prescreen all of your study participants to ensure they will be safe to scan. If you are unsure if an item is safe, visit the website www.mrisafety.com or contact the MRI technologist. The prescreening process will eliminate those people with an unsafe item without wasting a scanning slot. An updated list will be given out after the safety training to help guide you in the prescreening process.

There are a vast number of medically implanted devices on the market. If a study participant has an implanted device, have them provide documentation for the device if at all possible. Usually a patient will be given a card after the device is surgically implanted that gives the device manufacturer, model name, and model number. Remember, a device that is safe at another MRI site may not necessarily be safe here, so we need to know exactly what the device is. If you ever have any questions regarding MR safety, please ask the RCBI MRI technologist.

There are titanium aneurysm clips that are safe in a 3T magnet but we do not scan them. The current standard is for a radiologist to document its safety. Since we do not have a radiologist on staff, all aneurysm clips are contraindicated for a scan.
Since there may be a time when you (as the study investigator or team member) will have to enter the magnet room, all study personnel must also fill out a screening form. Although this form need only be filled out once, if there is any change in your medical history (such as metal in the eye or surgical implants), it will be your responsibility to inform the person conducting the scan and to update your form.

**People in the Control Room**

Only personnel associated with the current study will be allowed in the control room. All personnel in the control room during a study must have a current HSSP or ERRP number. At no time will spouse, friends, etc of the study participant remain in the control room. It is a standard MR safety procedure to have only MR safety trained personnel in the control room. There are also privacy concerns and overcrowding issues. We do have a very comfortable waiting room for the study participant’s family/friends.

At least, one member of the research team must be present in the control room throughout the duration of the study. The RCBI provides support for operating the magnet by providing an MR technologist. However, it is the responsibility of the investigator team to (1) bring the patient to the control room and introduce him/her to our MR technologist; (2) explain to the patients what will be required from him/her as being part of the study; (3) inform the MR tech of the type of images to be acquired; (4) provide help and follow directions of the MR tech in case of an emergency; (5) take charge of the patient once the imaging session is finished.

**Sedation Policy**

If your subject requires a drug for claustrophobia, we require that you have a medical doctor or authorized nurse on site in the MR suite who will monitor the patient for the duration of the scan. This person must have successfully completed the RCBI MRI Safety Course prior to the scan.

**Pregnancy**

While there are no known risks associated with performing an MRI on a pregnant woman, no studies on the long-term effects of RF tissue heating to the fetus have been done. It is standard MR safety to only perform scans on pregnant women for medically necessary reasons. Therefore it is our policy not to scan pregnant women. We do not give pregnancy tests so if your participant is unsure we will not scan her. Except for members of the research team, women who are pregnant (including a pregnant parent or spouse of a study participant) are not allowed into the scan room at any time.
Image Release Policy

If you have not received consent for image release, you **CANNOT** give the study participant an image of their brain. Under no circumstances should you release a full volume of images to a study participant. The policy of the center is to release only one slice view. Further information regarding this restriction may be found on the RCBI Wiki page.

Scanner Operator

Only RCBI-approved personnel may operate the MRI console. Except by prior arrangement and approval of the RCBI Director or Associate Directors, this will be the RCBI staff MR technologist.

Time Slots

The time you schedule (which is the time you will be charged) for your study will include total scan time, setup/breakdown time (ex: room setup and positioning) and final screening. This takes about 10-15 min depending on the study. So if your total scan time is 45min, you can not book a 45 min scanning slot. To keep scheduling fair only reserve time on the calendar when you actually have a subject. Fees will be applied to those that consistently overbook or reserve time before they have a confirmed subject.

MR safety is *everyone*’s responsibility. If you notice a situation that causes you concern, please bring it to the attention of the RCBI staff. Be sure not to let anyone who has not undergone MR safety training (including colleagues, study participants/family members, University Facilities personnel etc.) into the card-locked MR area unless you accompany them and are prepared to instruct them in MR safety as necessary.