

OHSU MRI PROTOCOLS, DOCUMENTS, PROCEDURES
AND OTHER INFORMATION FOR TECHS

Revised 10/11/2011

BILATERAL BREASTS WWO

Bilateral Breasts WWO

revised 10/11/2011

Charge as MR BREAST WWO CONTRAST BILAT W/CAD

Page Dr. Oh for protocols. Page Alina Tudorica pgr 11496 for sequence questions.

Patient Prep:

1. IV 22 g or larger. Labs if needed per department protocol.
2. Patient will have filled out the screening form, as well as a breast questionnaire.
3. Change the patient from the waist up, with gown open in the front. Please provide extra gown to wrap around the patient for privacy.
4. If they are coming from having a mammo, ask them to remove any nipple markers that may have been left on the skin.
5. If the patient has implants, make sure to ask them what kind if they didn't indicate so on the screening form.

Room Prep:

1. Breast coil and forehead rest.
2. All Breast Implants and the ISPY research breast study will still be scanned on MRI3 until further notice. All other breast exams can be done on MR3 if scheduled there. Routine exams preferred on MR1, MR2 or MR3 in that order of preference.
3. Load power injector, dose by patient's weight. 20ml Omni or 10ml Multihance maximum.
4. Close the blinds and use the mobile privacy screen for patient privacy.

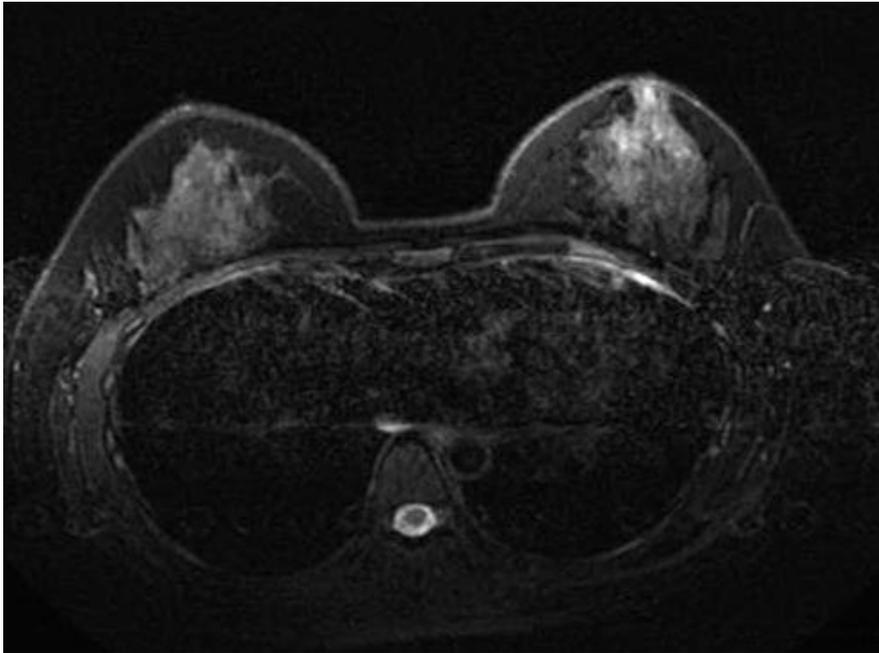
In the room:

1. Earplugs, blanket, pillow under pt's lower legs, call button, power injector.
2. If the patient has a palpable lump, place a fiducial on the area of interest.
3. Position patient prone on the coil, head first.
4. Make sure to gently pull as much breast tissue into the FOV as possible without hurting the patient.

Sequences: Use protocol "BREAST W/WO NEW 2011" on Philips
Do not change anything other than FOV and number of slices.

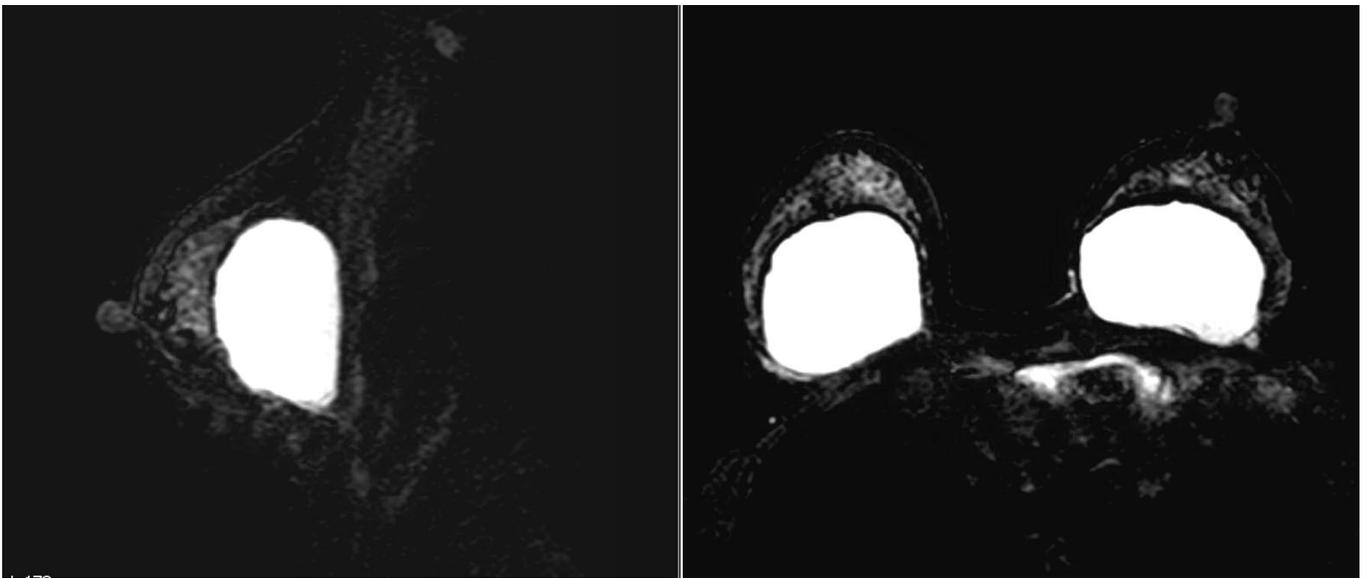
1. **3-plane localizer:** Check positioning. Reposition if necessary!
2. **Reference Scan:** Center on both breasts

3. **AX T2 SPAIR Bilateral:** Sense should be OFF. Center on both breasts, FOV to cover entire breast tissue and lymph nodes. If fat sat fails, run the repeat sequence (it has the prep turned to “auto” instead of “full”)

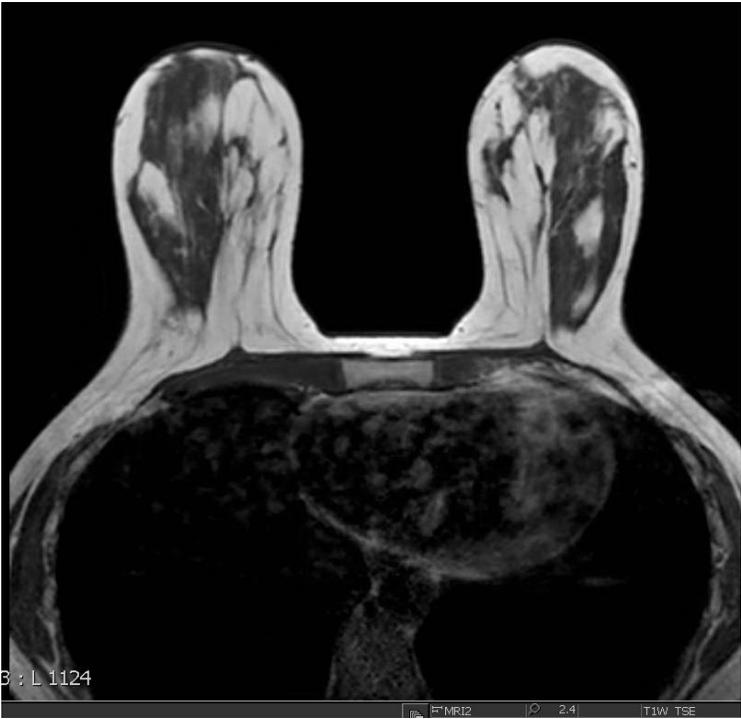


4. If implants are present:

- a. Saline Implants: No extra sequences required. Call the rad to see if they want to proceed.
- b. Silicone implants: (will be bright on the STIR images)
 - i. Add SAG STIR with water saturation.
 - ii. Add AX STIR with water saturation.



5. AX T1 NO FS:



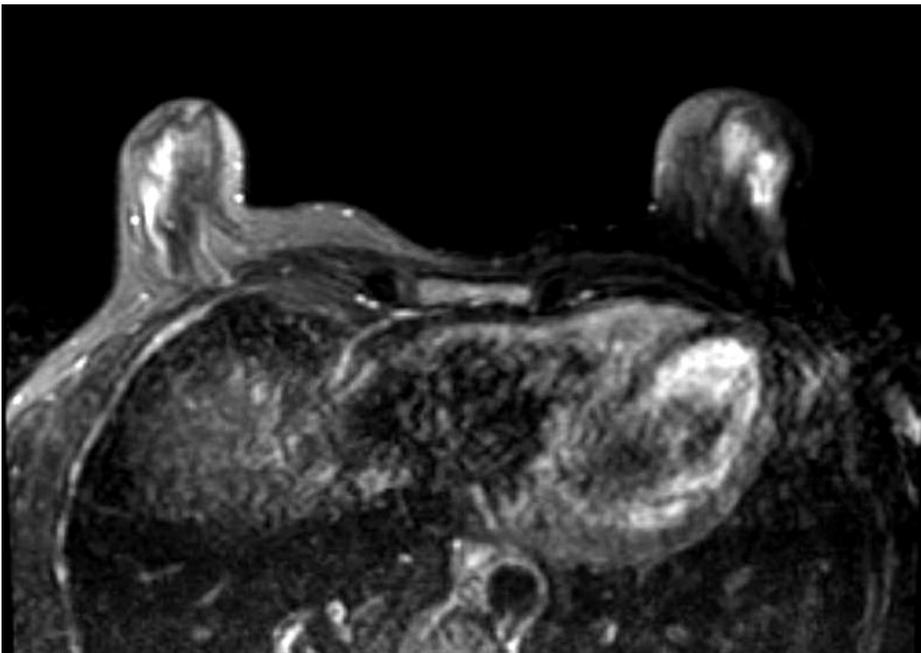
6. AX eTHRIVE_HR_NO FS:



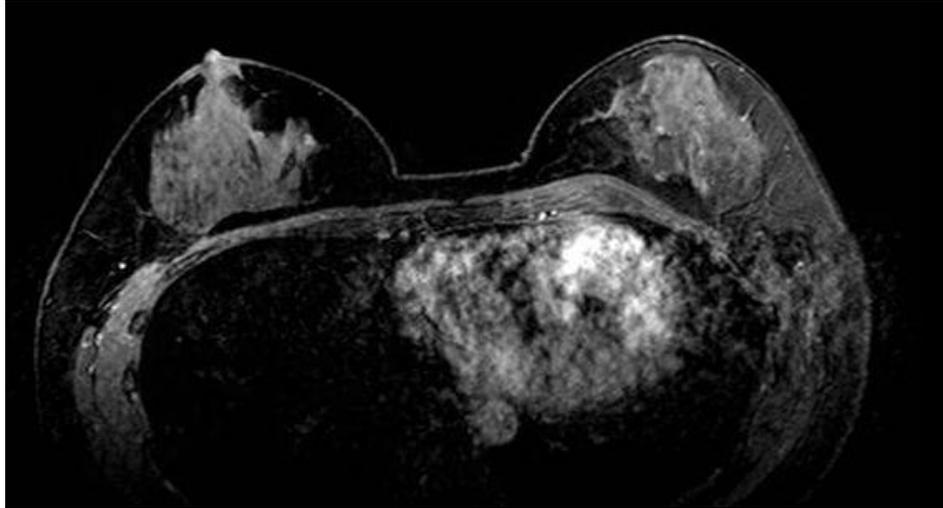
7. **Pre AX eTHRIVE_HR:** Make sure the shim volume is centered on the Sag view for both breasts.



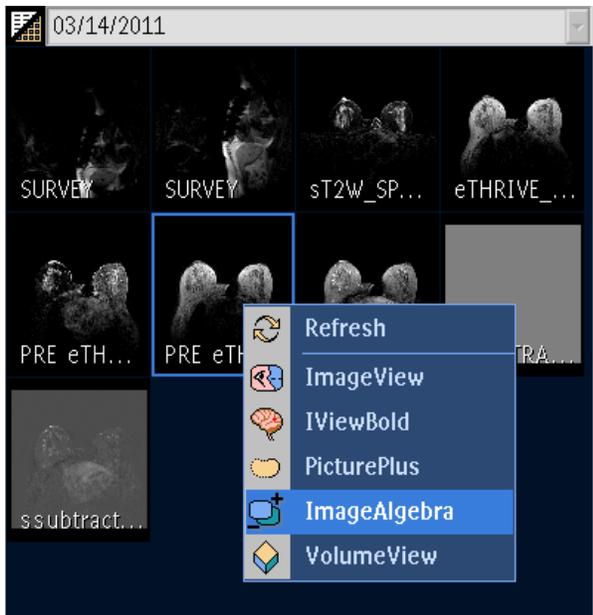
IF FAT SAT FAILS ON PRE AX THRIVE: Turn off Fat Sat and repeat. You must also turn off Fat Sat on the POST!! The below image is an example of when fat sat fails. This sequence would need to be repeated again without fat sat, and the post Thrive would also need to be run WITHOUT fat sat.



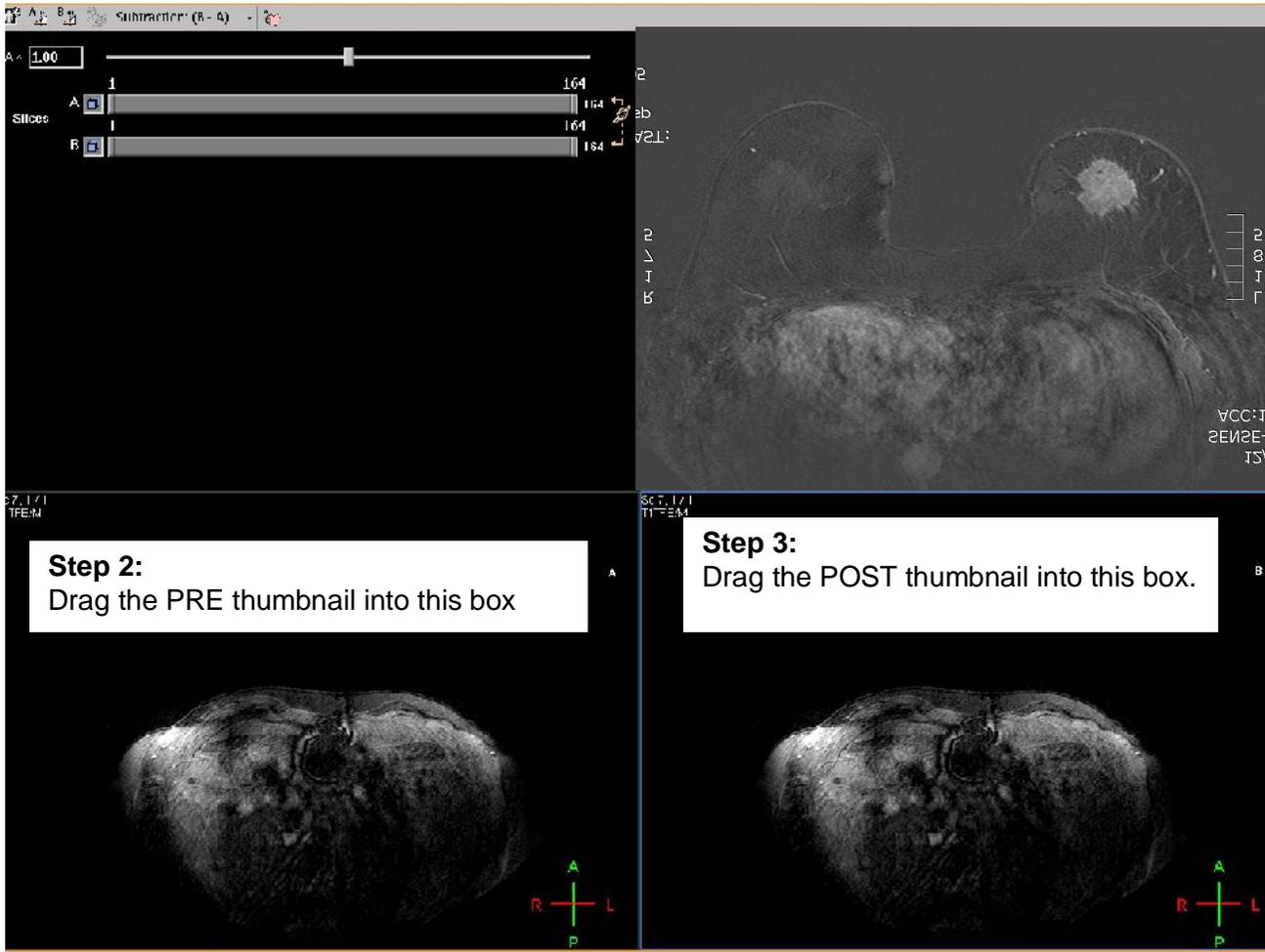
8. **POST AX eTHRIVE_HR:** Make sure the shim volume is centered on the Sag view for both breasts.
- a. Tell the patient what to expect (Contrast will be injected and about 1minute later the scan will start, etc)
 - b. Start the sequence so it is prepped and will prompt you to start the scan.
 - c. **Inject the appropriate contrast amount (dosed by weight) @ 2.0ml/s followed by 20ml Saline flush @ 2.0ml/s.**
 - d. **Watch the injector countdown from 50 seconds and then start the scan.**
 - e. Manually create a subtraction. Send the subtraction to PACS, but NOT to Dynacad. Dynacad makes it's own subtraction.



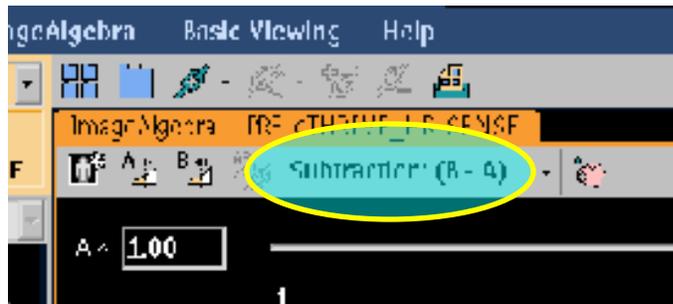
9. **MANUALLY CREATE A SUBTRACTION:** Manually subtract the pre from the post. Send to PACS only.



Step 1:
In the Advance Viewer,
Right-Click on the “Pre”
thumbnail and select
“ImageAlgebra”



Step 4:
Select "Subtraction B-A"



Step 5:
Click "Generate Series"



10. **Fax all forms** to the number on the breast fax cover sheet. Be sure to sign and completely fill out all 4 forms:
- Cover fax
 - Pages 2 and 3 of the screening form (signed by you)
 - Breast questionnaire (signed by you)
 - Contrast information form (signed and completely filled out by you)

11. **Send all good images to Dynacad, and Pacs, including the Survey.**
Do not send any "bad" images you repeated.