



Processing a GSI Head on the CT Scanner

1) Select Patient Exam, Select ST 67 keV + MAR Series and Load into GSI Viewer



2) Select this series:
HEAD W/O 67keV+M

1) Select the exam.

Mini Viewer

Viewer

Add / Sub

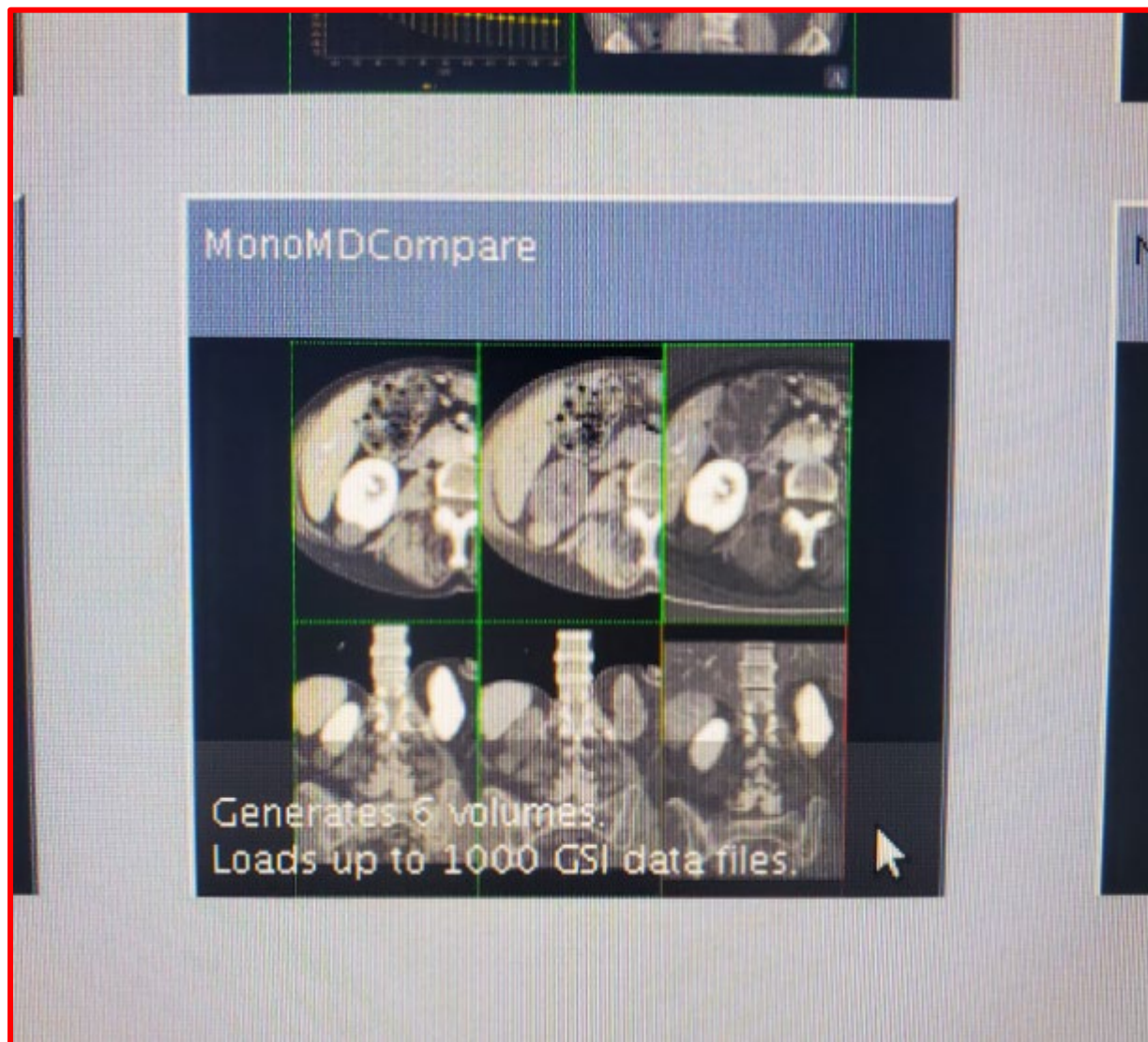
GSI Viewer

Vol Viewer

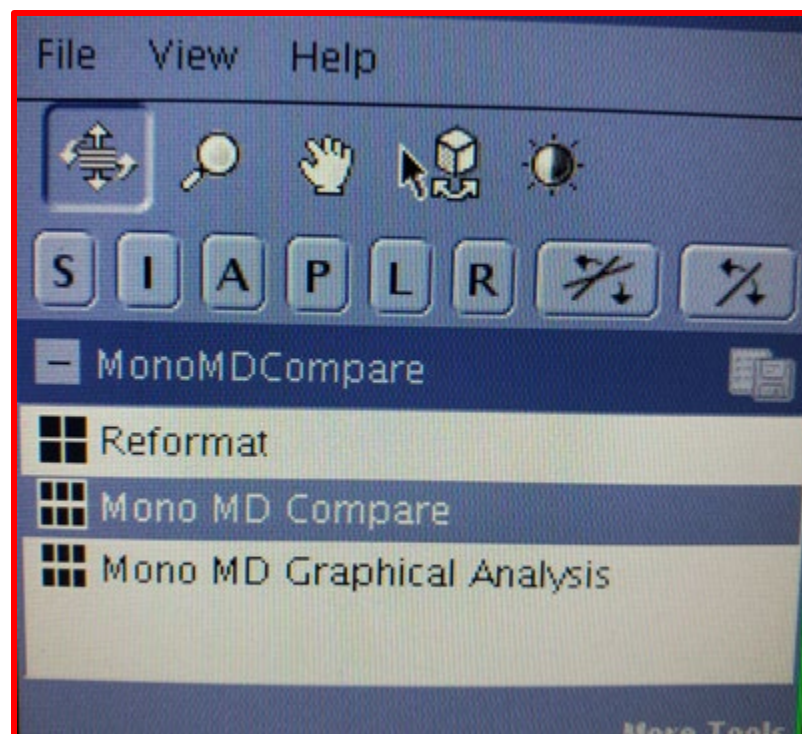
Neuro3DFilter

CD/DVD/USB

2) Select Mono MD Compare



3) Select Mono MD Compare



You will then see all the processed series

Drag the "X" outside of the head.

Low mono keV (70)

Water (Iodine)

Iodine (Water)

High mono keV (100)

Iodine (Calcium)

Calcium (Iodine)

Axial *Mono/[+] A196 ***** Axial *Material A196 ***** Axial

S: 70.74
Im: 30
DFOV: 22.0 x 32.9cm
SOFT/+M
Ex: 14 Jul 2021

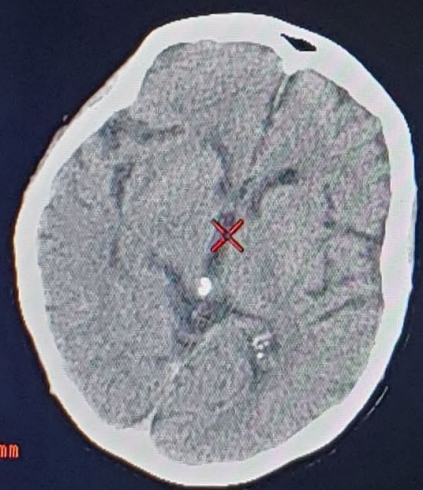
S: 70.74
Im: 30
DFOV: 22.0 x 32.9cm
MD SOFT/+M
Ex: 14 Jul 2021

S: 70.74
Im: 30
DFOV: 22.0 x 32.9cm
MD SOFT/+M

R
1
1
0

L
1
1
0

L
1
1
0



3.00mm
keV: 70
5.00mm P:0.531:1

3.00mm
Water (Iodine)
5.00mm P:0.531:1

W:80 L:25 P133
Axial *Mono/[+] A196 *****

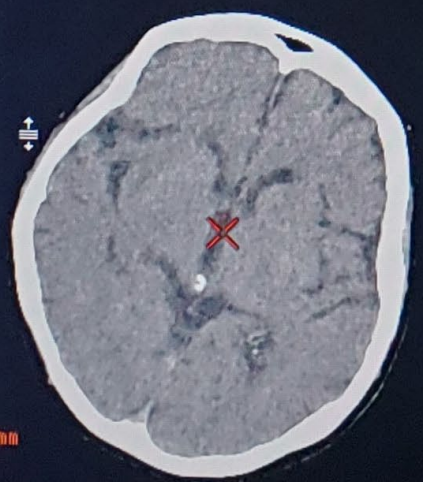
W:300 L:1000 mg/cm3 P133
Axial *Material 2 A196 *****

S: 70.74
Im: 30
DFOV: 22.0 x 32.9cm
SOFT/+M
Ex: 14 Jul 2021

S: 70.74
Im: 30
DFOV: 22.0 x 32.9cm
MD SOFT/+M
Ex: 14 Jul 2021

R
1
1
0

L
1
1
0



3.00mm
keV: 100

3.00mm
Iodine (Calcium)

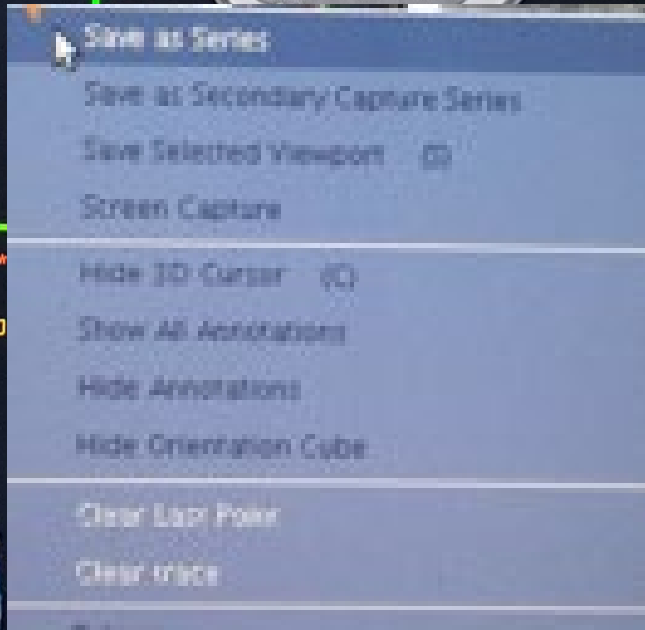
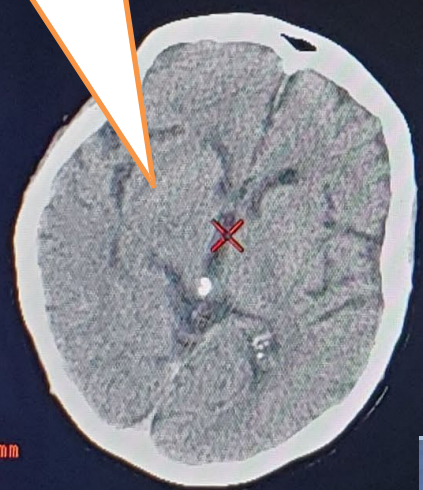
4a) Choose Low and High mono keV

Axial *Mono/[+] A196

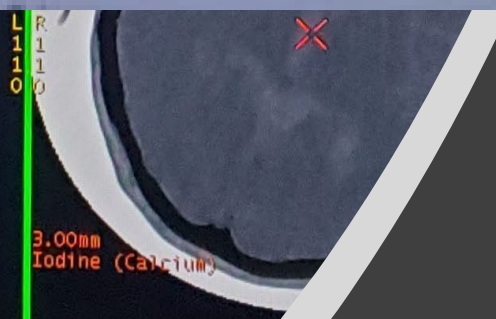
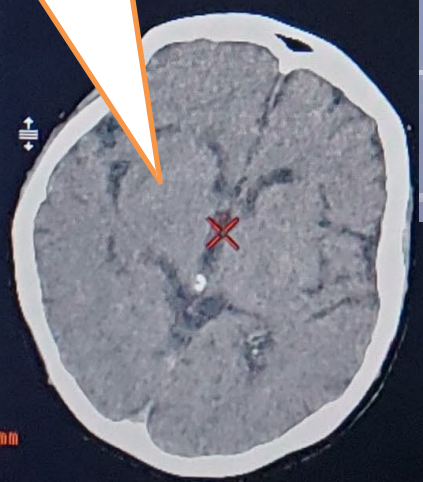
14 Jul 2021 S: 70.74 Im: 30 Ex: 14 Jul 2021 Im: 30
DFOV: 22.0 x 32.9cm MD SOFT/+/M
Axial *Material A196

S: 70 Im: 30 Ex: 14 Jul 2021 Im: 30
DFOV: 22.0 x 32.9cm MD SOFT/+/M

While over the low keV series, right click and select "Save as Series"

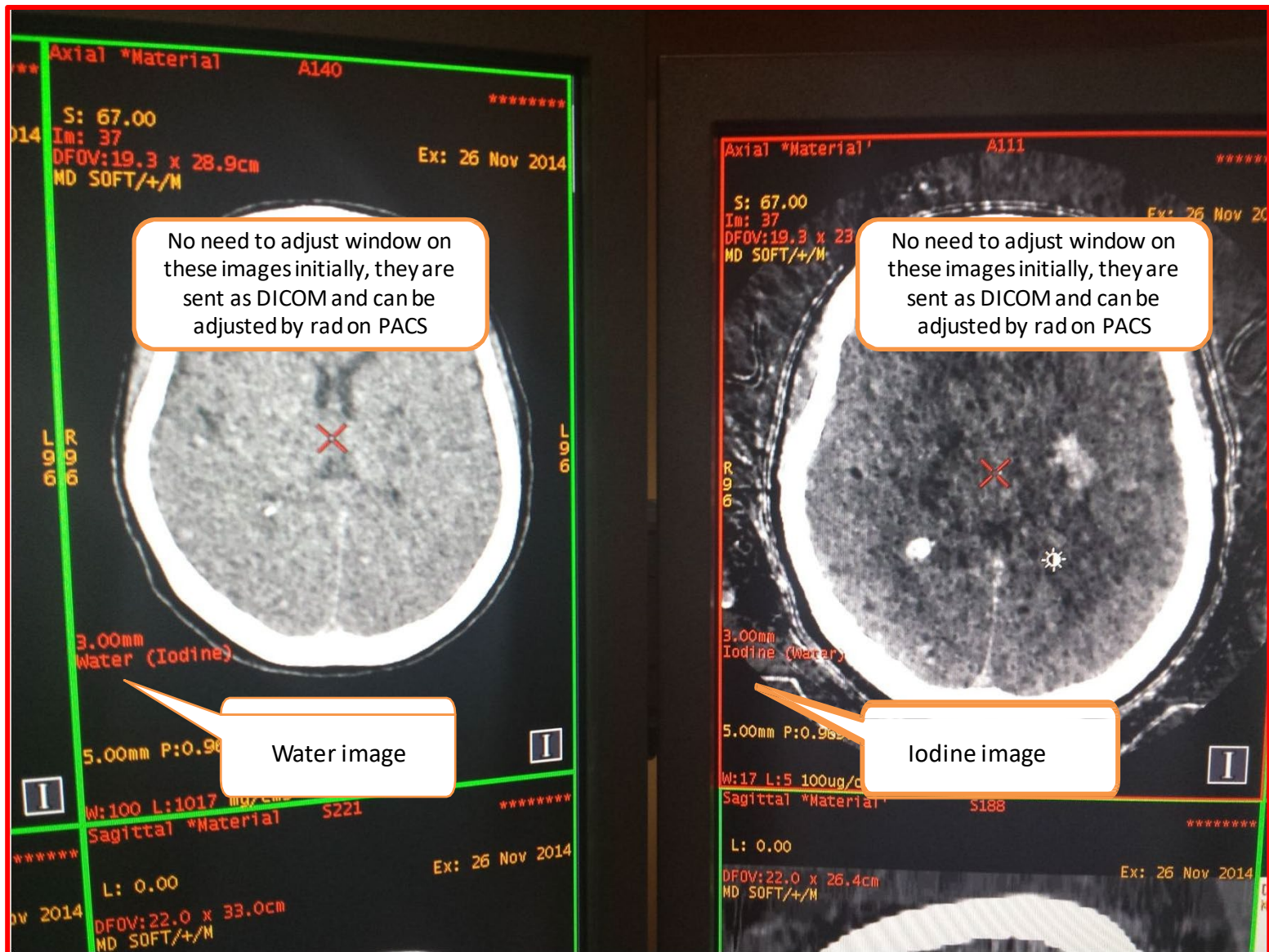


Repeat for high keV series



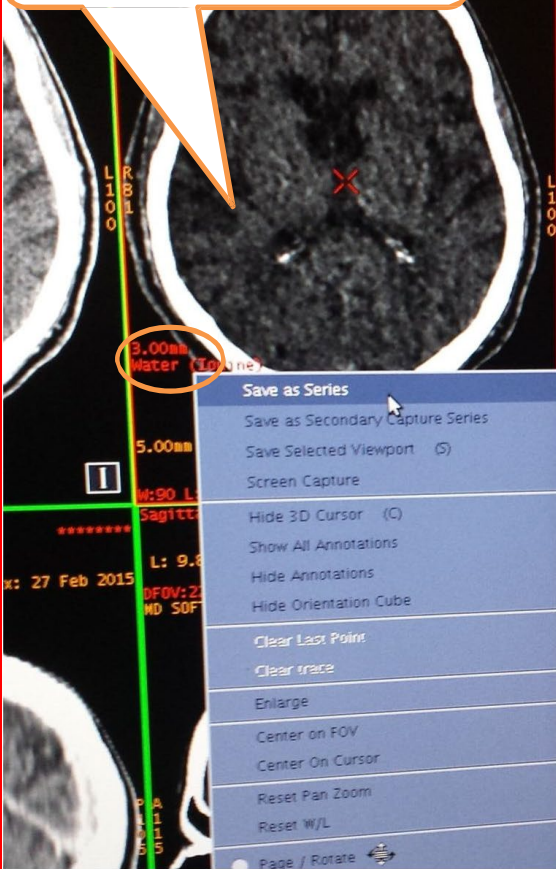
4b) Save as Series – Low and High keV

5a) Prepare Water & Iodine images

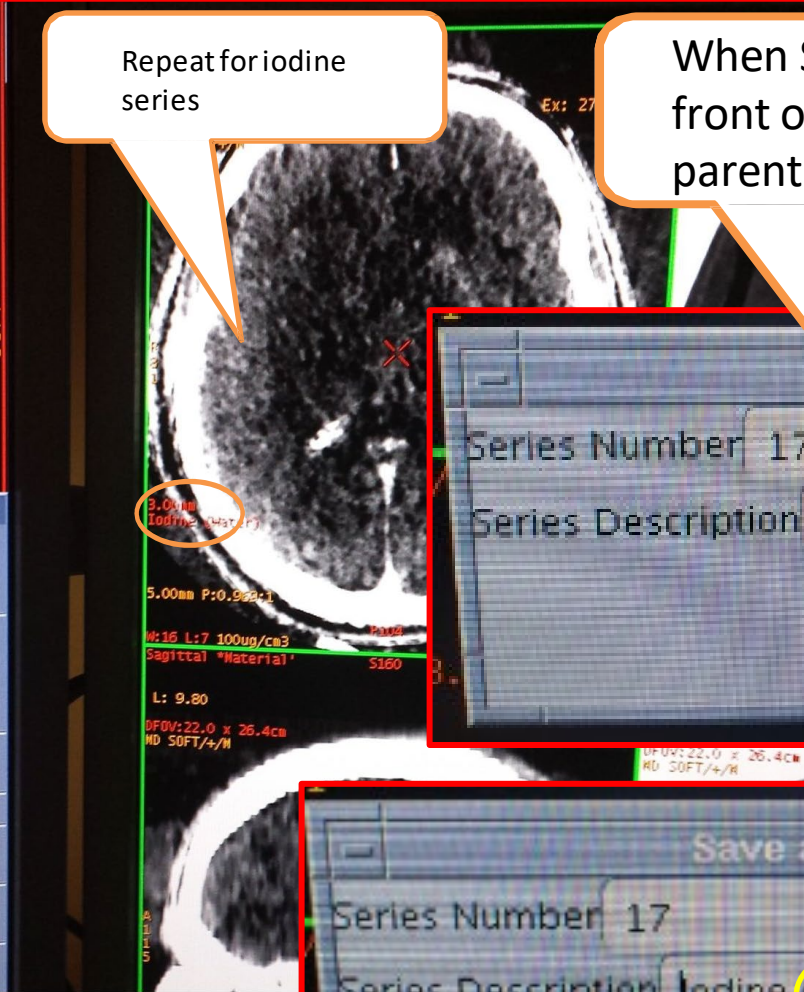


5b) Save series – water and iodine

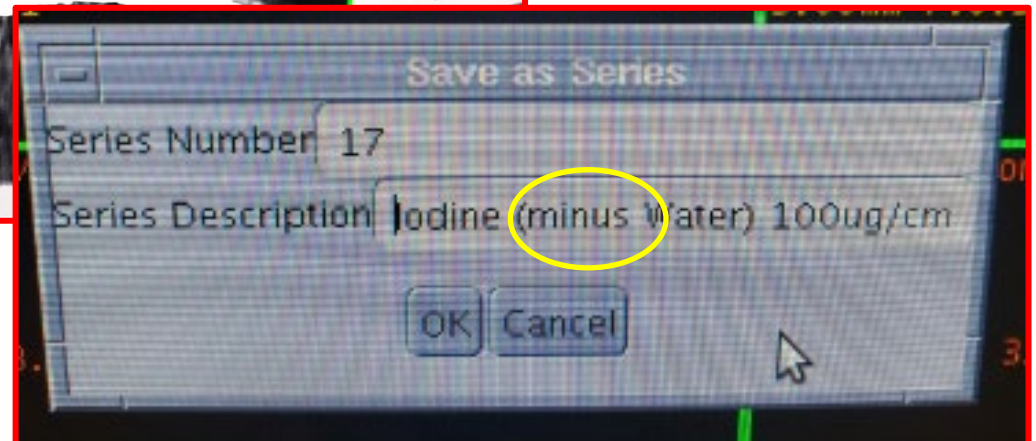
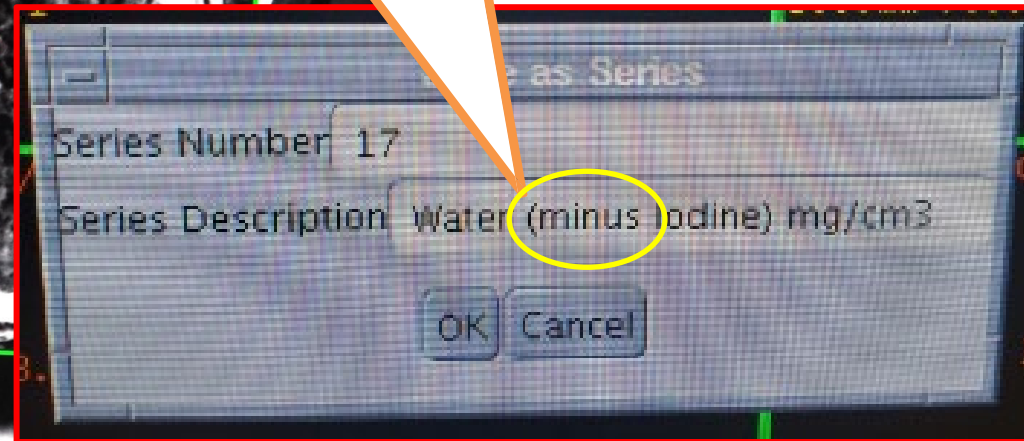
While over the water series, right click and select "Save as Series"



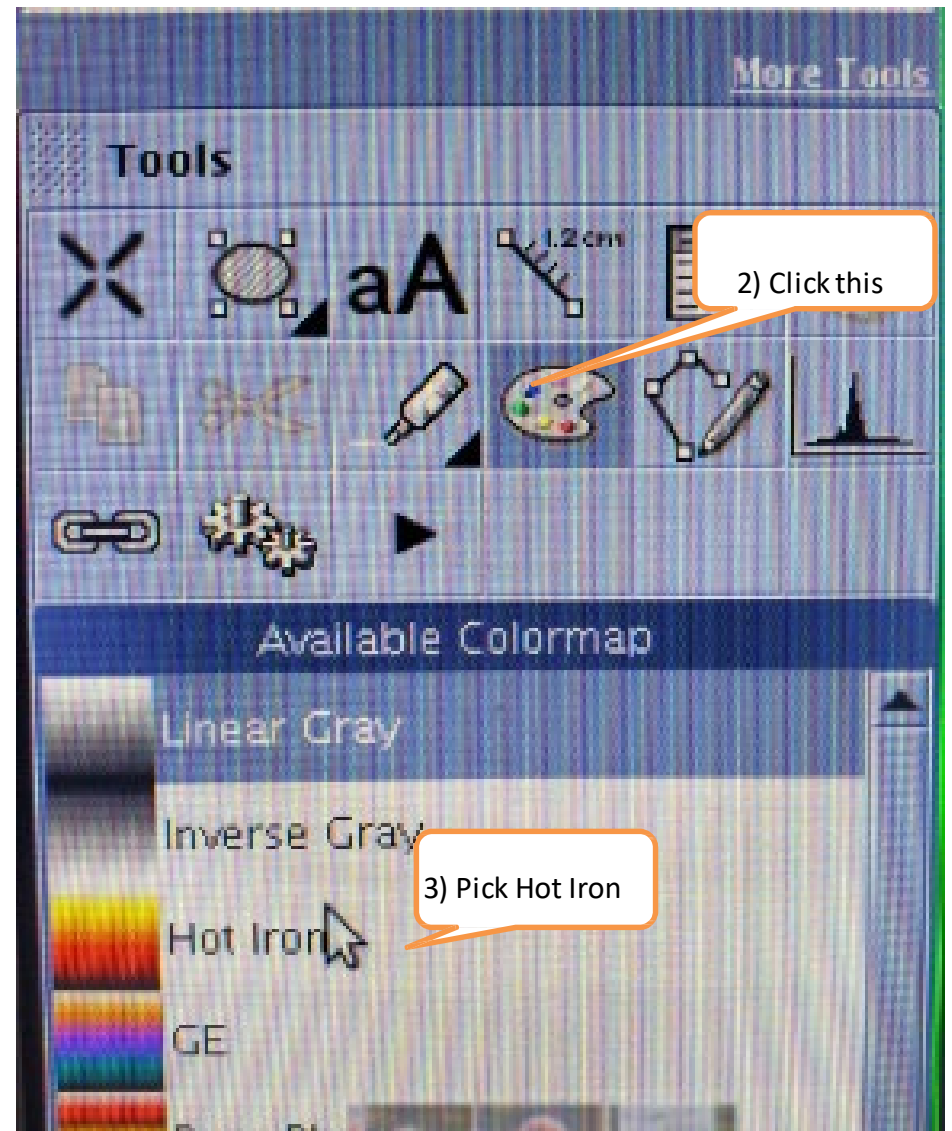
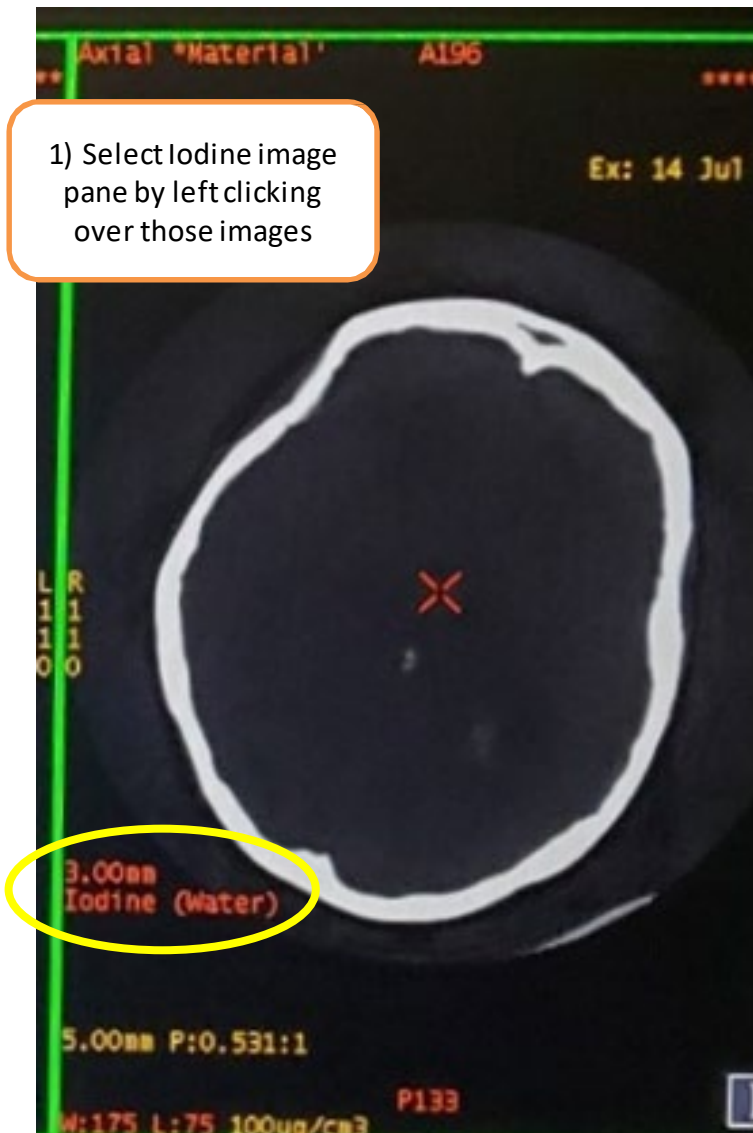
Repeat for iodine series



When Saving, type minus in front of material pair inside of parentheses.



6a) Color Iodine images



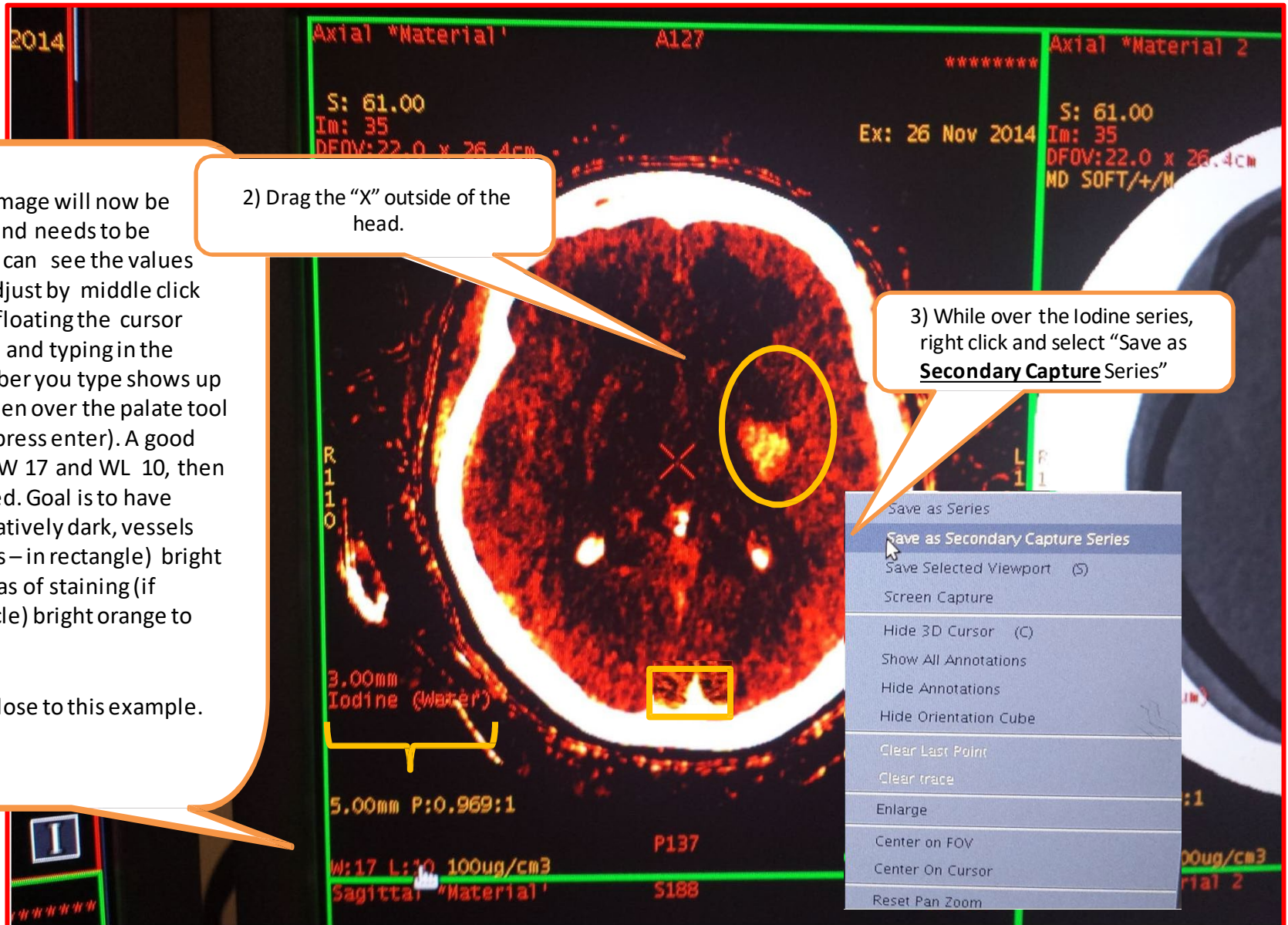
6b) Color Iodine images

1) The Iodine image will now be shades of red and needs to be windowed. You can see the values here and can adjust by middle click and drag or by floating the cursor over "W" or "L" and typing in the value (the number you type shows up on the left screen over the palate tool area until you press enter). A good start point is WW 17 and WL 10, then adjust as needed. Goal is to have background relatively dark, vessels (venous sinuses – in rectangle) bright yellow, and areas of staining (if present – in circle) bright orange to yellow.

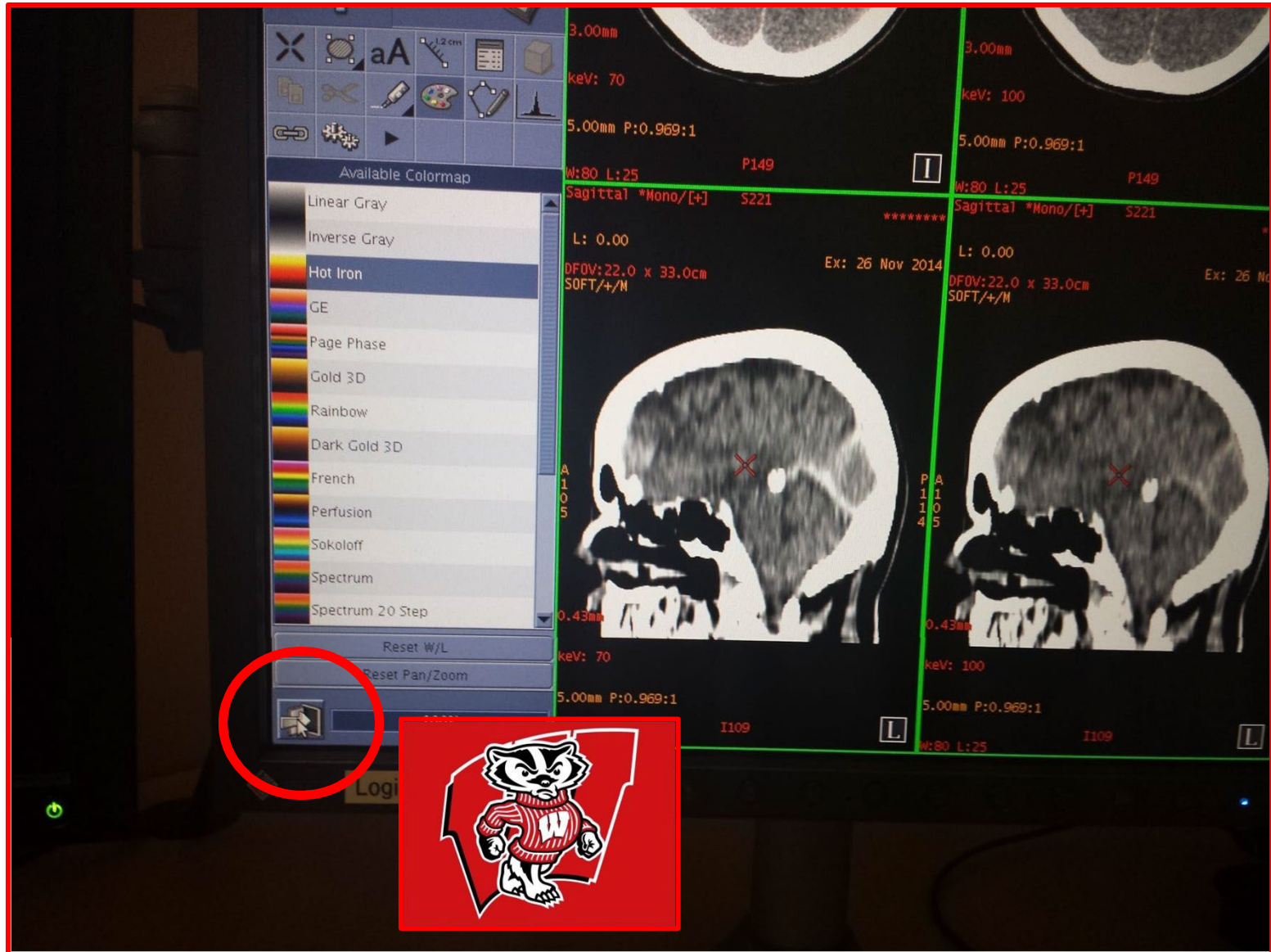
Something close to this example.

2) Drag the "X" outside of the head.

3) While over the Iodine series, right click and select "Save as Secondary Capture Series"




7) Exit dual energy program



8) Send images to PACS!

1 / 225 examinations

Patient Name	Patient ID	End Rev.	Exam ID	Date	Desc
		New	17000	Feb 23 2015	CT HE
		New	6218	Feb 23 2015	CT AP
		New	17040	Feb 23 2015	CT AP
		New	15600	Feb 24 2015	CT AP
		New	17900	Feb 27 2015	CT HE
		New	15300	Mar 02 2015	CT AP
		New	18041	Mar 02 2015	CT HE
		New	18051	Mar 03 2015	CT HE

2) Hold CTRL and left click on each of the series you made to select all of them

Series	Type	...	Description	Modality
1000	REFORMATTED	60	None 70 kVp	CT
1001	REFORMATTED	60	None 100 kVp	CT
1002	REFORMATTED	60	None (water) 100uV/cmD	CT
1003	REFORMATTED	60	None (iodine) 100uV/cmD	CT
1004	SOFT	60	None (iodine) 100uV/cmD	CT