

CT Head Perfusion Post Processing

Vitrea

Login password to the Lt on the tower

Retrieving and Loading Images

Retrieve images under Dicom Query at bottom of screen

Enter name and then click Query box

When status folder turns green upload complete

Double click name to see all series

Choose series labeled perfusion

Click Load Volume (Lt column under image)

Calculating Perfusion

Software will automatically choose your artery and vein.

In the Lt hand column check graph (bell curve) make sure artery peaks before vein and there is a nice curve. (Vein is blue, Artery is red)

If patient moved apply motion correction by clicking the box under Series Verification

You can scan thru images two ways:

Using the drag bar under the graph or Rt clicking and drag
Up/down thru images
Rt/Lt thru phases

If you find that the graph results are inconsistent with the norm you may choose to designate your vein and artery manually.

Using your Lt click draw ROI around the area where you see the vessel.

Then under Artery and Vein designate which vessel you are naming

If you want to delete ROI use delete button on keyboard.

Once you have designated vessel and are happy with bell curve hit

Compute (located Lt hand column Artery and Vein)

Software will compute perfusion and then display 4 on 1

Top Lt is you axial reference image
Top Rt cerebral blood volume (CBV)
Bottom Lt cerebral blood flow (CBF)
Bottom Rt mean transit time (MTT)

Placing ROI's and Saving Images

Use roller wheel to locate most inferior images
Line up center line on ref. image so that it is midline. (Hover over line and Lt click to adjust)
Now Choose ROI template (Lt hand column towards the bottom)
To save engage the camera by clicking Snap located top Lt column
Hold down Ctrl S to save all four images as one.
Repeat process for all phases (should be 8 pages of 4 on 1)
All images are saved under report (report tab at bottom)
Go to Report to view images
Hold down ctrl button and Lt click over images a green box will appear around the images. Click on all images to send and then hit export a list of locations will appear choose your destination and export.