

 University Health™	Policy #: Rad Proc 13.12.28
SUBJECT: Neck Perfusion Study 3.13	Effective: 10/1/2013 Revised: 7/15/2016
APPROVED BY: Eduardo Gonzalez-Toledo, MD PhD	Page 1 of 3

Purpose: To provide computed tomography staff with the required protocol for performing a CT Perfusion.

Scope: All adults patients 18 years and older.

Procedure:

Clinical Indication: Suspected infarct (usually follows a non-contrast study of the brain)

Patient Preparation: None

Orientation: Head first

Breathing: Normal breathing

Oral Contrast: None

IV Contrast: Per Weight: *If clinically indicated* 1ml/lb or 2ml/kg Visipaque 320 not to exceed 150ml injected @ 3ml/sec

Coverage: Base of skull through vertex

Anatomic Reference: Orbitomeatal line

Scan Delay: See group note below

Pertinent information: Acquire an Axial non-enhanced series of the whole brain. If a CT Angiogram is to be included in the examination, it should be done before the CT Perfusion study. If an abnormality is seen in the CT Angio, define slice range to be consistent with findings.

Group 1: Non-contrast of whole neck.

Scan Mode	Thickness Speed Pitch	Table Interval	SFOV	kVp	Auto mA/ Noise Index	Prep Time (sec)	Recon Type
Axial Full 2.0	5 2i	10	Head	120	140	0	Standard

Review images and determine slice location. Consult the radiologist. You must be sure there will be an artery and a vein that can be detected within the slice range.

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Group 2. Contrast 50cc of 300; Inject at 4cc per second 5 sec scan delay

Scan Mode	Thickness Speed Pitch	Table Interval	SFOV	kVp	Auto mA/ Noise Index	Total Exposure Time (sec)	Recon Type
Cine Full 1.0	5.0 4i	0	Head 23	80	190-200 180 images	45 -350 50 - 300	Standard See below*

***Data Reconstruction: Show recon 1 4i 5mm**

Algorithm: Recon 1-Standard Recon 2-Standard 1.25mm Recon

Reformat: Axial, Sagittal and Coronal MIPS

Network: Recon 1, 2 and Sagittals and coronals to PACS; Recon 3 and 4 to AWSERV

Notes: Additional locations can be acquired with another injection of contrast after waiting 5-10 minutes.

On the Perfusion series, type in the location 10mm below the selected location. At 4i 5mm this will give you the location and 10mm below and 10mm above.

The interval must be 0 and number of images should be 180.

Cine time between images is 1 second.

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