# RIH - FACE / ORBITS / SINUS GE LIGHTSPEED VCT PROTOCOL 

## Application: fracture, tumor, cellulitis, sinusitis

| Position/Landmark | Supine head first or feet first Zero at outer canthus of eye. |
| :---: | :---: |
| Topogram Direction | Craniocaudal |
| Respiratory Phase | Any |
| Scan Type | Helical |
| KV / mA / Rotation time (sec) <br> Pitch / Speed (mm/rotation) <br> Noise Index / ASiR / Dose Reduction | $\begin{gathered} \hline 120 \mathrm{kv} / \text { smart mA (50-330) / } 0.5 \mathrm{sec} \\ 1.375: 1,55.00 \mathrm{~mm} \\ 10 / 20 / 20 \% \\ \hline \end{gathered}$ |
| Detector width x Rows = Beam Collimation | $0.625 \mathrm{~mm} \times 64=40 \mathrm{~mm}$ |
| Average Tube Output | $\begin{gathered} \text { ctdi }-8.3 \mathrm{mGy} \\ \text { dlp }-185 \mathrm{mGy} . \mathrm{cm} \end{gathered}$ |
| Helical Set <br> Slice Thickness/ Spacing <br> Algorithm <br> Recon Destination | reconbody <br> part thickness/ <br> spacing algorithm recon <br> destination <br> 1 face orbit sinus bone $2.5 \mathrm{~mm} \times 2.5 \mathrm{~mm}$ bone + pacs <br> 2 thin face orbit sinus $.6 \mathrm{~mm} \times .6 \mathrm{~mm}$ bone + for dmpr <br> 3 face orbit sinus std $2.5 \mathrm{~mm} \times 2.5 \mathrm{~mm}$ standard pacs |
| Scan Start / End Locations <br> DFOV | Sinus: 1 cm inferior from the maxilla Face: 1 cm inferior from the chin 1 cm superior to the frontal sinuses 25 cm decrease appropriately |
| IV Contrast Volume / Type / Rate | 70 mL Iohexol (Omnipaque 350) / 2 mL per second hand or power inject, if required |
| Scan Delay | 50 seconds |
| 2D/3D Technique Used | DMPR of 3mm x 3mm coronal series (auto-batch off), average mode, auto transferred to PACS <br> For mandible ct: 3mm x 3mm sagittal-oblique series parallel to the right and left mandibular body, average mode, auto transferred to PACS |
| Comments: This protocol is the routine for all face, sinus, and orbit studies. Recon 2 is a thin bone algorithm for reformats. Coronal reformats, $3.0 \mathrm{~mm} \times 3 \mathrm{~mm}$, average mode are routine for this protocol. Use a symmetrical sagittal image as the reformat reference image. The coronal plane is perpendicular to the hard palate. |  |
| Images required in PACS | Scouts, $2.5 \mathrm{~mm} \times 2.5 \mathrm{~mm}$ sharp axial face/sinus, $2.5 \mathrm{~mm} \times 2.5 \mathrm{~mm}$ standard axial face/sinus, $3 \mathrm{~mm} \times 3 \mathrm{~mm}$ sharp coronal face/sinus, Dose Report <br> For mandible ct: 3mm x 3mm sagittal-oblique series parallel to the right and left mandibular body |

