# RIH - FACE / SINUS <br> GE LIGHTSPEED 16 / OPTIMA CT580 PROTOCOL 

Application: fracture, tumor, cellulitis, sinusitis

| Position/Landmark | Supine head first or feet first <br> Zero at outer canthus of eye. |
| :---: | :---: |
| Topogram Direction | Craniocaudal |
| Respiratory Phase | Any |
| Scan Type | Helical |
| KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) <br> Noise Index / ASiR / Dose Reduction | $\begin{gathered} \hline 120 \mathrm{kv} / \text { smart mA }(50-200) / 0.5 \mathrm{sec} \\ 1.375: 1,13.75 \mathrm{~mm} \\ 10 / 20 / 20 \% \end{gathered}$ |
| Detector width x Rows $=$ Beam Collimation | $0.625 \mathrm{~mm} \times 16=10 \mathrm{~mm}$ |
| Average Tube Output | $\begin{gathered} \hline \text { ctdi - } 8.3 \mathrm{mGy} \\ \mathrm{dlp}-185 \mathrm{mGy} . \mathrm{cm} \\ \hline \end{gathered}$ |
| Helical Set Slice Thickness/ Spacing | body thickness/  recon <br> recon spacing algorithm destination . |
| Algorithm <br> Recon Destination | 1 thin face sinus $.6 \mathrm{~mm} \times .6 \mathrm{~mm}$ bone + for dmpr <br> 2 face sinus bone $2.5 \mathrm{~mm} \times 2.5 \mathrm{~mm}$ bone + pacs <br> 3 face sinus std $2.5 \mathrm{~mm} \times 2.5 \mathrm{~mm}$ standard pacs |
| Scan Start / End Locations DFOV | Sinus: 1 cm inferior from the maxilla Face: 1cm inferior from the chin 1 cm superior from frontal sinus $25 \mathrm{~cm}$ <br> decrease appropriately |
| IV Contrast Volume / Type / Rate | 70cc omni 350 / 2cc 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 and sinus studies. Recon 1 is a thin bone algorithm for reformats Coronal reformats, $3 \mathrm{~mm} \times 3 \mathrm{~mm}$, 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, 3mm x 3mm sharp coronal face/sinus, Dose Report <br> For mandible ct: 3mm x 3mm sagittal-oblique series parallel to the right and left mandibular body |

