Children’s Surgical Specialty Group - Pediatric Surgery-Nuss Center

PROTOCOL FOR CT SCAN OF THE CHEST

**Important:** The CT MUST be done on quiet respiration. If this is not done correctly, the Haller index will be falsely low.

CT scan of chest ordered **without contrast**
CT scan done:
- Small child – 4mm thick, 4mm spiral sections
- Large child – 8 mm thick, 8 mm spiral sections

CT scan done starting at thoracic inlet through bony thorax, arms overhead

CT scan starts with AP and lateral scout and film run to include:
- Soft tissue windows
- Bone windows
- Lung windows

When dictated, impression should include, but not limited to:
- Haller index and from what image measurement was taken. Haller index is the transverse (coronal) measurement divided by the AP (sagittal) measurement at its deepest point. Measurements greater than 3.2 are considered severe
- Symmetry
- Rotation/non-rotation of sternum and the degree of rotation
- Cardiac impressions should include but not limited to the presence of the following:
  - Compression
  - Displacement
  - Distortion of shape
- Pulmonary impressions should include but not limited to:
  - Compression
  - Presence of Atelectasis
  - Distortion of shape
  - Skeletal (rib or vertebral) anomalies
- Other organ involvement or skeletal defects that the Pectus deformity may have an effect upon must also be noted.

Please send the CD of CT along with radiologist interpretation.

Please contact call us with any further questions at the Nuss Center (757) 668-6877 or you can email us at pectus@chkd.org.