***CHILDREN’S NATIONAL MEDICAL CENTER***

***DEPARTMENT OF RADIOLOGY***

***ULTRASOUND PROTOCOL***

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**Issue Date: 04/08/2015 Policy: Thyroid**

**Approved by:**

1. **Indications for a pediatric chest study include but are not limited to:**

* Evaluation of palpable neck masses
* Enlarged thyroid
* Evaluation for abnormal lab values
* Follow up imaging of previously documented nodules
* Evaluation of the gland for suspicious nodules, pre surgery
* Evaluation of patients with a high risk for thyroid malignancy
* Evaluation of the parathyroid glands when hyperparathyroidism is suspected
* Localization of cervical lymph nodes (palpable or pre surgical)

1. **Patient Prep:**

No patient prep needed.

1. **Protocol:**

* A high frequency linear transducer, either 6-15 MHz or 9 MHz, should be utilized. Cine clips are to be saved unless impossible to obtain.
* Imaging to be performed in the supine position with the neck hyperextended.
* The 6 standard zones should be included – upper, mid, and lower poles of the thyroid gland on each side.
* Document areas of location, size, number and characteristics of a nodule, including measurements in all 3 dimensions.
* Document any areas of thyroid abnormalities such as, echogenicity, margins, presence of calcifications, and presence of lymph nodes including areas in the cervical and lateral chain.
* Save cine clips of complex fluid, internal septations, loculated pockets and other pathology. Static cine clips of fluid pockets are very useful to determine inherent particulate movement.
* In thyroid masses, in addition to grayscale and color Doppler images save cine sweeps and few spectral Doppler waveforms for internal vessels.
* If applicable, document the presence of the parathyroid glands.