

ENT NEWS

A Service of the Ear, Nose, & Throat Center, PC

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Advanced Imaging Procedures What and When?

The advance of imaging technology provides great benefit to physician's and patients but not without significant expense which has lead to laborious HMO pre-certification requirements and risk pool compensation tied to imaging utilization. It is hoped that the following information will help in deciding what studies are indicated for general clinical situations realizing that individual patient circumstances and clinical judgment may call for alternative approaches.

Thyroid Studies Although relatively inexpensive thyroid scans and ultra sounds yield a limited amount of information. If a palpable nodule is present referral for a needle biopsy is both diagnostic and cost effective.

Scans and ultra sounds of the thyroid in patient's with normal neck exams for vague symptoms such as foreign body sensations or swallowing difficulties rarely yield useful information but frequently show small sub-clinical nodules. Such findings are extremely common (especially in women over 40) but rarely significant and typically lead to further follow-up imaging. An esophagram or ENT referral are probably better choices in these situations.

A thyroid scan is indicated in a hyperthyroid patient especially with diffuse thyroid enlargement particularly if the condition appears to be somewhat chronic. If short term, a trial of NSAIDS to treat thyroiditis might be indicated first.

A thyroid ultra sound may be useful if the clinical exam of the thyroid is uncertain or for ultrasound guided needle biopsy of sub-sternal or other nodules not accessible for needle biopsy in the office.

A CT of the neck is not typically useful for thyroid disease except to define the extent of intra-thoracic involvement in large sub-sternal goiters.

CT or Ultra-sound of the Neck These studies, particularly the CT scan, are useful for acute inflammatory conditions to assess cervical adenitis verses an abscess. Although the ultrasound is less expensive it is not as definitive and not useful in planning or performing surgical drainage.

As with thyroid nodules, when a patient presents with a neck mass ENT referral for a complete head and neck exam and needle biopsy is the most cost effective approach. Further imaging is guided by the results of these evaluations and subsequent therapy decisions.

The past few years have seen an increase reliance on CT scanning to diagnose peritonsillar abscess. This is typically a clinical diagnosis made in a patient with unilateral tonsillar pillar swelling hiding the involved tonsil, uvular deviation, trismus and a hot potato voice with a normal appearing contralateral tonsil. Needle aspiration or incision and drainage of the peritonsillar space confirm the diagnosis. In lieu of imaging a call to an otolaryngologist for a curb side consult or to arrange a timely evaluation can save everyone both time and expense.

PET CT Scanning These are extremely expensive studies that can be highly valuable in assessing the extent of a patient's cancer and their response to therapy. As false positives are quite common in the first three to six months after therapy they should be deferred for several months after therapy is completed. They may be helpful in avoiding surgical exploration in a PET negative patient. Ordering of these studies should probably be left to those directly involved in the patient's oncologic care.

CT scan of the Sinuses These studies are very useful in diagnosing sinus disease but sometimes can be over-read with a radiologists' final impression of "chronic sinusitis" when only minimal findings are present. This can lead to an erroneous diagnosis and over-treatment with expensive antibiotics. Reading the body of the report can help while reviewing the actual films is even better. Such review is now much easier with the advent of web-based image access.

Typically a CT should be reserved for patients with fairly classic sinonasal symptoms who have failed medical management with antihistamines, decongestant, nasal steroids and antibiotics. Sinus CTs for cough or sensation of post nasal drainage are of low yield. Plain sinus films may be a better screening tool for these patients.

Sinus CTs in children deserves special mention given the frequency of upper respiratory infections in this age group. Explaining to parents that a preschool or school age child can have 3 to 6 URI's per year with purulent rhinitis lasting a week or more can reset their expectations of what is normal and ease their demand for antibiotics and imaging studies. Deferring such studies until the child manifests such problems in spring or summer can be useful. Children that develop pre-septal orbital cellulitis with only eyelid swelling but no swelling of the ocular conjunctiva, proptosis or changes in extraocular movement may be initially managed with parenteral antibiotics with a CT reserved for those who fail to improve on antibiotics, show the above mentioned post-septal signs or seem significantly toxic.

MRI of the Head These studies are most commonly ordered in ENT patients who have unilateral tinnitus or unilateral sensorineural hearing loss to evaluate for an acoustic neuroma. Although such tumors are uncommon, if found early the clinical outcome for these patients is much better and thus warrants an aggressive search in patients with suggestive symptoms.

Some vertigo or dizziness patients warrant an MRI to again look for an acoustic neuroma or Multiple Sclerosis. This is probably best deferred until after an ENT evaluation.

An MRI or CT of the head may also be indicated to evaluate for an anterior cranial fossa mass in a patient with anosmia without associated sinonasal symptoms or without a clear history of onset after significant head trauma or a viral URI.

CT of the Head In addition to anosmic patients as described above, a CT of the head may be indicated to evaluate for an intracranial process in patients with persistent facial pain not responsive to medical management particularly if isolated to the frontal area or if unilateral.

The doctors at the Ear Nose and Throat Center would be happy to discuss any individual patient with you to help you decide on what diagnostic studies or treatment strategies might be indicated. Of course we would also be happy to evaluate your patients directly as well.

“ NEW TO THE ENT CENTER- HOME TV LOOP SYSTEM”

Loop systems, which allow hearing aid users to have sound in auditoriums and churches directly channeled into their aids, have markedly improved sound quality and intelligibility for many with hearing aids. These systems work with the t-coil or telephone setting in the person's hearing aid. Now people can enjoy the same technology at home with a TV loop system. The system is available for \$299 which includes professional installation. A live demonstration is available at the Ear, Nose, and Throat Center, and can make television viewing a pleasure once again for those frustrated with TV sound quality. Call to set up an appointment for your patients today at (616) 575-1213.

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