

MONTHLY NEWSLETTER

April 2004

MRI/CT WAITING ROOMS REMODELED

With the installation of the second MRI and CT units at the 32nd Ave. office (32-25 Francis Lewis Blvd), we have seen a large increase in volume. To continue our high-level of service to our patients, we have just completed the remodeling of our waiting and reception areas.

Four windows have been added to the main reception room, where patients

complete appropriate paperwork. A receptionist then escorts the patients to our new changing room suite. If the patient requires administration of intravenous contrast, a nurse will escort the patient to a new prep room, where an IV catheter is placed. Finally patients are escorted to a new holding area. If a patient requires oral contrast, it is administered while the patient is in the holding room.

A flat-screen TV has been installed in the new holding area.

We believe that the remodeling of the reception and waiting rooms have significantly improved patient comfort, and decreased the amount of time patients wait for their exams. We apologize for any inconveniences during the construction.

TELEPHONE SYSTEM MEETS GOAL

At Main Street Radiology-Bayside, we are able to assess the performance of our telephone reception services through our telephone tracking software, installed late last year. Our initial goal was to be able to limit the time a caller is on hold to less than 1 minute in 95% of cases. We are happy to report that this goal was recently accomplished, with less than 5% of callers placed on hold for more than 1 minute.

We were able to meet our goal by increasing staff at appropriate times where deficiencies existed, as shown on reports generated by the telephone tracking software. We will continue to improve our services by establishing higher standards. If you have any suggestions on how to improve our telephone services, please contact Pauline Collins or Samantha Abreu, office managers, at 718-428-1500.



Telephone reception staff

PHYSICIAN SURVEY

Since the opening of our first Bayside office in 2000, Main Street Radiology has experienced tremendous growth. We believe our success is primarily due to our constant effort to provide the highest quality service to our patients and referring physicians. During the past 4 years, we have taken every

suggestion and complaint seriously, and implemented corrective actions to improve our services.

In an effort to continue to provide the highest level of Radiology services to our community, we have enclosed a "Physician Survey". We would greatly

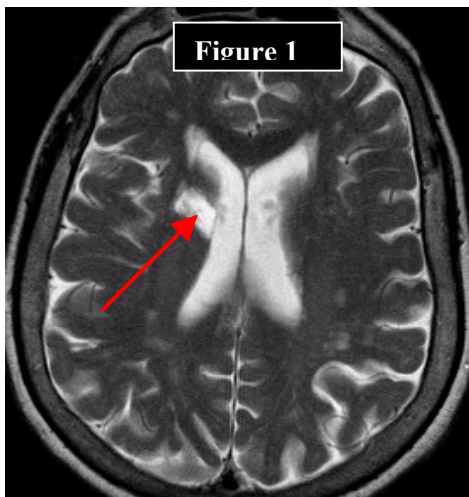
appreciate if you can complete the form and fax to our office at 718-428-2475. As always, you can speak directly to any of our radiologists, supervisors, or customer service representatives at 718-428-1500.

CASE OF THE MONTH

DIFFUSION IMAGING

History: 80 year-old female with sudden onset of loss of vision from left eye. Patient was referred to Main Street Radiology-Bayside for brain MRI with diffusion imaging.

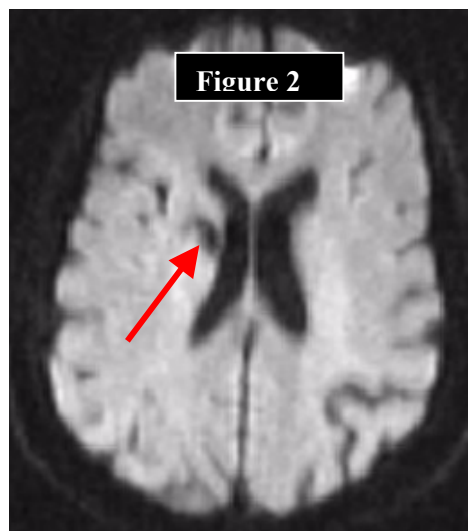
Findings: On the conventional axial T2-weighted image (Figure 1), a focal area of increased signal is seen within the right corona radiata (arrow), which is low signal on the corresponding diffusion weighted image (Figure 2), compatible with an old infarct. Within the right occipital lobe, high signal abnormality is seen on both the T2-weighted and diffusion-weighted images (Figures 3 and 4), compatible with an acute infarct.



Discussion: Diffusion is the term used to describe the random, Brownian motion of water molecules. In diffusion-weighted imaging (DWI), MR images made sensitive to the diffusion properties of water molecules are generated. This requires high performance magnetic gradients and was introduced into clinical practice in the mid 1990's. Diffusion-weighted MRI provides image contrast that is different from that provided by conventional MR techniques.

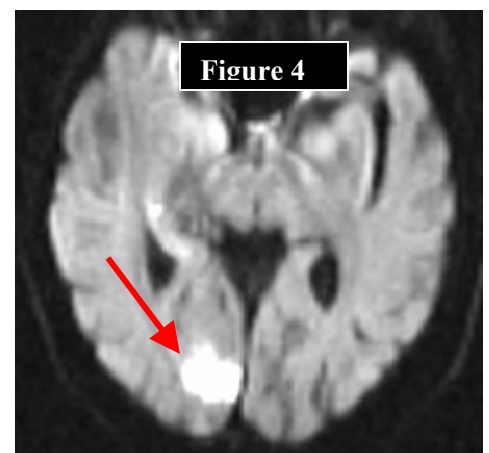
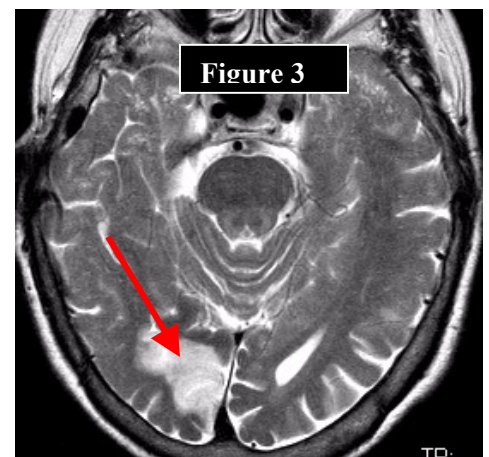
Application of diffusion imaging has been found in ischemia, tumors, infection and white matter disorders.

The most important and widely used clinical application of DWI is in the evaluation of ischemia. DWI is the most sensitive method for detection of acute ischemia, allows distinction of old versus new infarct, and helps distinguish acute ischemia from other processes with a similar conventional MR imaging appearance. DWI in conjunction with perfusion imaging can also be used to determine viable ischemic tissue versus non-viable infarcted tissue. On DWI, an infarct can be detected within minutes of onset of clinical symptoms, several hours before conventional MR imaging. The diffusion properties of infarcted tissue follow a predictable course- they are virtually always abnormal in the first 24 hours and virtually always normal 2 weeks later.



Restricted diffusion can be seen in processes other than acute ischemia. Brain abscesses have been shown to have restricted diffusion possibly secondary to the viscosity of pus. DWI can also be used to differentiate

arachnoid cysts from epidermoid cysts. Cytotoxic edema (e.g. ischemia) can be easily distinguished from vasogenic edema (e.g. posterior reversible encephalopathy syndrome). Increased diffusion is also seen in acute demyelinating plaques. Diffusion tensor imaging is currently being developed to study white matter tracts and shows great promise.



DWI is available at Main Street Radiology, utilizing our high field magnet and high performance gradients. When ordering a brain MRI, DWI can be requested by the referring physician at no extra charge and only adds minutes to the exam.