KAISER PERMANENTE SAN FRANCISCO

DEPARTMENT OF NEUROLOGY

Imaging Procedures

**Carotid Ultrasound**

- CUS is a non-invasive procedure where you will be lying on a stretcher while a radiology technician places a smooth probe onto your neck.
- The probe will pick up sound waves from the arteries in your neck.
- The sound waves are processed to give a 2 dimensional picture of the blood vessels in your neck, and help us determine if you have significant blockages.

**Computed Tomography (CT “Cat” Scan)**

- During a Head CT scan, you will be placed on a stretcher, and your head will be lined up within a large circular hole within the machine.
- Head CT scan gives detailed pictures of the brain and bony structures.
- We sometimes inject a contrast dye into your blood stream before the CT depending on the problem in question. Usually dye is given to search for blockages in the blood vessels. The dye used in very safe in most patients. The ordering provider will determine whether or not dye is appropriate.
- In most cases, CT is a sufficient screening test for problems with the brain; however, in some instances it may be appropriate to obtain more detailed pictures from MRI.

**Echocardiogram**

- Echo is a non-invasive procedure where you will be lying on a stretcher while a cardiology technician places a smooth probe onto your chest.
- The probe will pick up sound waves from your heart.
- The sound waves are processed to give a 2 dimensional picture your heart as well determine how well each part is functioning.

**Magnetic Resonance Imaging (MRI)**

- During an MRI, you will be placed on a stretcher which slides into a narrow cylinder, which encloses your whole body. The machine makes thumping noises, which indicates that the magnet is taking pictures. Some people find that these sounds, and the confined space, make them anxious. We can give you medication to help you relax, if necessary.
- MRI gives us detailed pictures of the brain, cranial nerves, and surrounding soft tissues.
- We sometimes inject a contrast dye into your blood stream before the MRI depending on the problem in question. The dye used in very safe in most patients. The ordering provider will determine whether or not dye is appropriate.