Special Precautions

✓ Please inform the physician prior to the examination if:

- you are on blood thinners or have hemophilia.
- you have a cardiac pacemaker.
- you use a transcutaneous electrical nerve stimulator (TENS) unit.

✓ If you have myasthenia gravis you should ask your physician whether or not to take medications, such as Mestinon, before the examination.

Exam Results

When the examination is completed, the electrodiagnostic medicine physician will analyze the results and report them to the physician who referred you for the tests.

Your referring physician will use the test results to help decide on proper management.

This brochure is not a substitute for an informed discussion between a patient and his or her physician about the examination.

NAME

YOU HAVE AN APPOINTMENT WITH

DAY DATE TIME

If you have a co-pay, it is due at the time of service.
Thank You.

If you have any questions, they will be answered at the time of your examination, or you may call:

|Confluence Health Hospital
1st floor Neurology Department
1201 S. Miller St.
Wenatchee, WA 98801

(509) 433-3290

Form 40237 5/23

ELECTRODIAGNOSTIC MEDICINE

Nerve Conduction Studies

EMG

Evoked Potentials

EEG

An informational brochure for patients undergoing Electrodiagnostic Medicine Testing

What is Electrodiagnostic Medicine?

An electrodiagnostic medicine examination can be helpful in evaluating the causes of numbness, tingling, seizures, convulsions, pain, weakness, fatigue, and muscle cramping.

Several types of tests are used to study brain, nerve and muscle function. These include:

- Nerve Conduction Studies (NCV's)
- Needle Electromyography (EMG)
- Evoked Potentials (VER)
- Electroencephalograms (EEG)

An electrodiagnostic medicine physician undergoes special training in electro-diagnostic medicine procedures. The knowledge and expertise gained from such specialized medical training maximizes the ability of the physician to consider appropriate differential diagnoses in planning and performing the electrodiagnostic examination. The expertise enables the physician to assist referring physicians in establishing diagnoses, determining prognosis, and assisting in proper management.

The examination usually takes 20 to 60 minutes. There are no restrictions on activity before or after the testing and there are no lasting after effects.

Nerve Conduction Studies (NCV's)

NCV's test how well signals travel along a nerve and can help find the cause of abnormal nerve function. Signals are made to travel along the nerve by applying small electric pulses to the nerve at one site and recording the response at a different place along the nerve. The small electric pulses cause a short, tingling feeling that is usually uncomfortable. The nerve's response is picked up by a recording instrument and then is measured by the physician or technologist performing the test. Several nerves may need to be tested depending on the type of problem.

✓ Do not use lotion or powder prior to the test.

✓ Remove all jewelry and leave it at home.

Needle Examination (EMG or Electromyogram)

This test can help determine if there are abnormalities in the muscle or the nerve supplying it. During the needle EMG portion of the examination, the physician inserts a small needle into a muscle to record the electrical activity of the muscle. The electrical activity of the muscle is fed into the recording instrument and the physician then analyzes it by looking at a signal on the scope and listening to the sounds the activity makes through the speaker. There may be discomfort when the needle is inserted into the muscle.

This study is performed by a physician with special training in this area.

Evoked Potentials (VER)

Evoked potentials evaluate the function of nerve pathways that carry signals through the vision pathways. Nerve signals are produced in these nerves by applying pulses of light to the eyes. The nerve's response is picked up from the skin over the surface of the head. This study is performed by a trained technologist, and interpreted by a Neurologist.

What is EEG?

An EEG records the electrical activity of the brain. Highly sensitive monitoring equiment records the activity through electrodes that are placed at measured intervals on a patient's scalp.

The test is not painful. The head is measured and the electrodes are placed on the scalp with a paste like substance. The test itself usually takes about 120 minutes and the principal role of the patient is simply to remain still, relaxed and comfortable. During the test, the patient may be asked to take repeated deep breaths (hyperventilate) and may be shown a strobe light that flashes at different speeds. Both activities can help reveal different brain patterns that occur during sleep. For sleep tests, the patient may be asked to stay awake most of the night prior to EEG appointment or in some cases may be given a mild sedative.

EEG's assist physicians in the diagnosis of a variety of neurological problems, from common headaches and dizziness to seizure disorders, strokes and degenerative brain disease. The EEG is also used to look for organic causes of psychiatric symptoms and disabilities in children, and assist physicians in determining irreversible brain death.

General Instructions For Patients:

✓ **Please DO NOT bring children to this appointment.**

✓ You must eat a good meal about 2 hours before the test. It should be low in sugar content and no caffeinated beverages (coffee, tea, soda, chocolate), after midnight. Even if you normally do not eat, be sure you do!

✓ If you are having a Sleep Electroencephalogram, you need to cut your sleep time in half the night before (if you usually sleep 8 hours, then decrease to 4 hours). Once you are up, stay awake. This is VERY important.

✓ If you are taking any medications continue unless you doctor asks you to stop them for the test. Bring a list of any medications you have taken the 3 days prior to your test.

✓ Wash your hair well before the test. Your hair must be free of tonics, oils, hair sprays, etc. No teasing or braids. Bring a comb or brush with you. (You may want a scarf or hat too). Your hair must be completely dry before you arrive.

✓ If the patient is a small child, please bring their favorite toy, blanket or bottle.