

ELECTROMYOGRAPHY (EMG)

Overview

This outpatient diagnostic test is used to evaluate the health of muscles and the nerves, called motor neurons, which control the muscles. EMG is a valuable diagnostic device for determining the cause of muscle weakness and for identifying neurologic disorders.

Preparation

In preparation for the exam, the patient may be asked to wear a hospital gown and is positioned comfortably on an examination table. Electrodes are then placed on the surface of the skin, and thin needle electrodes are carefully inserted through the skin and into the muscles that need to be tested. A topical anesthesia may be used to reduce discomfort. Needles may be placed in a variety of muscles in the body, depending on the patient's symptoms and the type of testing needed.

Exam

The electrodes record the electrical activity within the muscles while they are at rest and during contraction. The patient will also be asked to contract and rest the muscles at various intervals. The physician can interpret this data to diagnose nerve or muscle dysfunction.

End of Procedure

When the exam is complete, the electrodes are removed and the patient is allowed to go home. The patient may experience minor bruising at the sites where the needles were inserted, but the bruising will fade within a few days.

