Radio Frequency Lesioning

Radio Frequency Lesioning is a procedure that sends radio waves (heat) through a needle to damage small sensory nerve endings and interrupt pain signals. The procedure is only recommended to those patients who have failed other pain treatments such as nerve blocks and/or medication. Radio frequency is considered quite effective. Some patients report pain relief up to two years after the procedure. Since nerve endings have a tendency to grow back, the pain will probably return at some time in the future. Fortunately, the procedure can be repeated if necessary.

Procedure Overview

Radio Frequency Lesioning is an outpatient procedure, usually done in the Operating Room or a Special Procedure Room. For your safety and comfort, you will be connected to monitoring equipment (EKG monitor, blood pressure cuff, and a blood-oxygen monitoring device). The doctor or nurse may start an intravenous line and give some medicine to help you relax. Depending on the nerves being treated, you will be positioned on your stomach (for nerves in the back) or on your back (for nerves in the neck). The area will be cleansed with an antiseptic solution and the doctor will inject some numbing medicine into the skin that may cause a burning sensation for a few seconds. After the numbing medicine takes effect and with the assistance of a special X-ray machine called a fluoroscope, the doctor will insert a special radio frequency needle. You will feel some dull pressure but not pain. After confirming that the needle tip is in position, a special needle tip (electrode) is inserted. Again, the proper location of the needle is confirmed by fluoroscopy. Using electrical stimulation, the doctor will verify the correct nerve. You will feel a tingling sensation similar to hitting your "funny bone." You may also experience some muscle twitching. The tissues surrounding the needle tip are then heated when electric current is passed using the radio frequency machine for 90 to 120 seconds. This will numb the nerves. After the procedure, we ask that you remain at the Clinic until the doctor feels you are ready to leave.

Procedure Details

Will you be asleep for the procedure? Since it is important for you to talk with the doctor and describe what you feel, you will not be put to sleep. You will, however, receive enough medication to keep you comfortable. How long will the procedure take? Depending upon the situation, radio frequency lesioning will take from 30 minutes to over one hour.

Before the procedure

Since you will be receiving medication it is recommended that you do not eat within eight hours before the procedure. If you are a diabetic, be sure to discuss your eating and medication schedule with your doctor. You may need to stop taking certain medications several days before the procedure. Please remind the doctor of all prescription and over-the-counter medications you take, including herbal and vitamin supplements. The doctor will tell you if and when you need to discontinue the medications. Tell the doctor if you develop a cold, fever, or flu symptoms before your scheduled appointment.

After the procedure

After the procedure, you may experience some muscle soreness for a few days. If so, you may want to apply ice or a cold compress to the affected area. Do not drive for the remainder of the day. Please have an adult drive you home or accompany you in a taxi or other public transportation. Depending on how you feel, you may resume normal activities and return to work the following day. If the doctor prescribes physical therapy, it is very important that you continue with the physical therapy program.

Procedure Risks

The risks, although infrequent, include: Allergic reaction to the medication; Bruising at the injection site; Infection at the injection site; damage to nerves or blood vessels near the lesioned nerve.