CT Myelogram

What is it?
A CT myelogram is a specialized X-ray taken after dye has been injected around the spinal cord. It is used for diagnosis and is not intended to be a treatment. It usually ordered by a surgeon when the patient has a condition preventing them from getting a MRI (i.e. a patient with a pacemaker) or the patient had had a previous spine fusion where the metal implants would cause distortion of the images. Additionally, in some cases CT myelogram images may provide better clarity and definition than an MRI.

How is it different from an MRI?
CT myelograms give the surgeon similar information as a MRI. However, there are a few differences in the way they are obtained. CT myelograms do expose the patient to radiation, whereas an MRI does not. Also, CT myelograms are more invasive because of the dye that is injected, and can cause some discomfort.

For these reasons, MRI’s are often preferred, but unfortunately many patients are unable to have an MRI. Also, if the patient has had a previous spine fusion operation, the metal implants can cause distortion of the MRI images, which is not as severe in the CT myelogram.

How is it performed?
The procedure is performed by a radiologist, not your spine surgeon. Dye is injected into the spinal fluid with a thin needle, and the needle is promptly removed. You will then be placed on your abdomen on a table that tilts back and fourth to let the dye flow around your spinal cord. Then, X-rays are taken, followed by a CT scan of the spine.

After the CT scan is finished, you are usually asked to be on bed rest with the head of the bed elevated for a couple of hours.

How long does it take?
Plan to make a day of it and have someone drive you home. Try to spend the remainder of the evening resting and lying as much as possible.

What are the risks?
The most common risk is a spinal headache. This is usually treated with lying in a flat position and high fluid intake. Rarely, spinal headaches lasting more than a few days can be treated with a small procedure by the radiologist. Other risks are allergic reactions to the dye or reactions with other medications you may be taking.

To avoid bleeding complications, you must discontinue all blood thinners such as coumadin, heparin, lovenox, fragmin, and aspirin for several days prior to the procedure.
Below is a list of other medications that should be discontinued at least 36 hours before and after having a CT myelogram:

**Antihistamines**
- Trimeprazine (Temaril)
- Methdilazine (Tracaryl)

**Tricyclic Antidepressants**
- Cyclobenzaprine (Flexeril)
- Perphenazine (Trilafon)
- Desipramine (Norpramin)
- Imipramine (Tofranil)
- Nortriptyline (Aventyl, Pamelor)
- Doxepin (Sinequan, Adapin)
- Protriptyline (Vixactil)
- Presamine
- Trimipramine Meleate
- Surmontil
- Amoxapine (Asecdin)

**Antipsychotic Agents**
- Haloperidol (Haldol)
- Lithium (Eskalith, Lithane)
- Chlorprothizene (Taractan)
- Loxapine (Loxitane, Daxolin)
- Thiothixene (Navane)
- Molindone (Moban, Lidone)

**Pain Medications**
- Tramadol HCL (Ultram)

**Phenothiazines - Tranquilizers**
- Chlorpromazine (Thorazine)
- Amitryptyline (Elavil, Etrafon, Endep)
- Phochlorperzaine (Compazine)
- Thiethylperazine (Torecan)
- Thioidazine (Quide)
- Acetophenazine (Tindal)
- Promazine (Sparine)
- Fluphenazine (Stelazine)
- Methotrimeprazine (Levoprome)
- Thiorodazine (Mellaril)
- Thiothixene (Navane)
- Flupropazine (Vesprin)
- Mesoridazine (Sertil)
- Butaperazine (Repoise)
- Propiomazine (Largan)
- Fluphenazine (Prolixin)

**Anxiolytics**
- Perphenazine and Amitriptyline
  (Triavil, Etrafon, Limbitrol)

**Other**
- Promethazine (Phenergan)

**Following up:** Make sure you have a hard copy of the myelogram or the images on a CD (compact disc) sent to your surgeon or bring them with you to your next appointment.