UW Medicine

If You Have Had Contrast Reaction

What you need to know about premedication

This handout is for patients who have had a moderate or severe allergic reaction when they received contrast in the past, who are scheduled for an imaging study that uses contrast materials.

Why do I need this scan?

Your doctors believe that a special imaging scan will help them better care for you. You are scheduled for either:

- A **computed tomography (CT) scan** that uses *iodinated contrast* (X-ray dye); or
- A magnetic resonance (MR) scan that uses a gadolinium contrast agent



Scan images will help your doctors care for you.



Scan this QR code with your phone camera for a digital copy of this handout.

What is contrast?

Contrast is a substance used in many types of imaging procedures. It helps your doctor see the inside of your body more clearly. Contrast is also called *contrast dye*, *contrast agent*, or *contrast media*.

Types of contrast include iodinated contrast for CT imaging and gadolinium contrast for MR imaging. Contrast is usually given *intravenously* (through an IV tube into your vein).

What puts me at risk for an allergic reaction to contrast?

You have a higher risk of allergic reaction to contrast if you have:

- Reacted to the same type of contrast medicine in the past. (See page 2 for a list of moderate to severe reactions to contrast.)
- Had moderate to severe reactions to 4 or more foods or drugs, that taking only Benadryl did not resolve. These reactions may have included having trouble breathing or swelling in your face.
- Current, active asthma symptoms.

What are the symptoms of an allergic reaction to contrast?

Moderate allergic reactions to contrast include:

- Hives (more than 12)
- Feeling short of breath
- Wheezing, trouble breathing
- Facial swelling
- Throat tightness without shortness of breath

Severe allergic reactions to contrast include *anaphylaxis*, which can be life-threatening and require IV medicines, intubation, or a hospital stay. Some symptoms of this severe reaction are:

- Low blood pressure (*hypotension*)
- Fast heart rate (tachycardia)
- Wheezing with shortness of breath
- Swelling in your throat and airway that makes it hard to breathe

If you have had any of these reactions to contrast in the past, **you** have a high risk of having another reaction if you are exposed to contrast again.

What do I need to do?

- Tell your technologist that you have had an allergic reaction to contrast before. Your technologist will need to talk with the radiologist and your doctor about whether you need contrast for this study.
- If your allergic reaction to contrast has been severe, you may need to sign a special *informed consent form* to confirm that you want to go ahead with a scan that uses contrast.
- If you have any questions or concerns after reading this handout, please tell the technologist. The technologist will tell your doctor. Your doctor will talk with you and answer your questions.
- Talk with your doctor about *premedication*.

What is premedication?

For people who have had allergic reactions to contrast, doctors have found that giving them medicine before the scan may help reduce the risk of their having another allergic reaction. This is called *premedication*. A medicine called a *steroid* is most often used for this.

Will premedication prevent my allergic reaction?

Most patients who have premedication do not have another allergic reaction to the contrast. But, a small number of patients (10%, or 10 out of 100 patients) who are premedicated have breakthrough reactions. A breakthrough reaction is an allergic reaction that occurs even after having premedication. Most times, these breakthrough reactions are similar to their first allergic reaction.

This means there is a small risk that you may have a repeat contrast reaction, even if you are premedicated. If this happens, your reaction will likely be similar to your first reaction.

What if I have tried premedication before?

A study at the University of Michigan found that 88% of patients (88 out of 100 patients) who had a breakthrough reaction with premedication on one scan did **not** have another breakthrough reaction when they were premedicated before a later scan. (To read about this study, visit www.ncbi.nlm.nih.gov/pubmed/19789241.)

This means that even if you have had a breakthrough reaction with premedication once, you may not have one the next time you are premedicated with steroids and given contrast dye.

How long after receiving contrast could I have an allergic reaction?

A small number of people have a delayed reaction to contrast. This means they get symptoms more than 1 day after they receive contrast. Most times, these delayed reactions include rashes, itchy skin, headaches, or nausea.

If you have a delayed reaction to contrast, you may need treatment with skin lotions, steroids, and antihistamines. Please call your primary care provider.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Weekdays 8 a.m. to 6 p.m., call:

- ☐ UWMC Montlake Radiology: 206.598.6200
- ☐ UWMC Northwest Radiology: 206.668.1744
- ☐ Harborview Medical Center Radiology: 206.744.3105

Call 911 if you are having an emergency.