What are the side effects of contrast agents?

As for all medical procedures, there are risks associated with the administration of contrast.

Most contrast administrations occur uneventfully. Commonly, patients experience a warm feeling throughout their entire body, a metallic taste in the back of the throat and/or a sensation of wetting themselves, though this doesn’t actually occur. These symptoms disappear very quickly at the time of the study and require no treatment.

The most common side effect is a minor contrast reaction, which occurs in 1% of cases. Symptoms include headache, sneezing, nausea, vomiting, hives and swelling, and usually settle rapidly. Occasionally medications may be required to help if the symptoms persist.

In approximately 1 in 10,000 cases a severe contrast reaction may occur. This includes a rapid or slow heart rate, low blood pressure, an asthma attack (bronchospasm) and complete circulatory collapse/shock. Such reactions require urgent medical treatment. Our staff is prepared to administer emergency treatment for these infrequent occurrences and immediate transfer the patient to the emergency department by ambulance.

As with any injection, the contrast medium has a slight chance of escaping from the vein and leaking into surrounding tissues. Such leakage, which is called extravasation, may cause bruising and mild pain. Our staff will advise of specific treatment required for this.

PLEASE ASK THE RADIOGRAPHER IF YOU HAVE ANY OTHER QUESTIONS
**What is contrast agent?**

During your CT or MRI examination, a contrast agent can help the doctor interpret CT or MRI images better by making certain organs or tissues stand out from the rest.

Contrast agents are used in many CT scans and MRI scans.

Quite simply they act like a ‘dye’ so they highlight areas that otherwise would be difficult to see on your scan. The use of intravenous (IV) and oral contrast greatly improves the accuracy of the examination and may assist in excluding many life threatening conditions, such as cancer.

**How is contrast agent given?**

Contrast agent can be injected into the patient’s vein (IV) or the patient may be asked to drink it.

Usually, the contrast agent is injected into one of your veins via a needle or a cannula (a soft, hollow, plastic tube) during your scan.

Once the cannula is in place, the needle is removed leaving a small thin plastic tube in the blood vessel.

At the appropriate point, an automatic injector will inject the contrast into the vein.

**What contrast agents will be used?**

The most common contrast agent used for CT scans is an iodine-based liquid. Iodine makes the areas with contrast in them appear white on the image and allows a better diagnosis.

The contrast agent used in MRI scans is based on a metal ion and is called Gadolinium. It is given for the same reasons as the iodine based contrast agents.

Contrast agents are passed out of your body through your kidneys. They are colourless and odourless, so you will not notice them passing through you.

**Do I need to give consent to have the contrast agent?**

A consultant radiologist will decide if you need contrast and will discuss this with you. You will be given the opportunity to ask any questions you may have.

Patients have the right to decide what happens to them and clinical staff have an obligation to provide sufficient information to ensure that such decisions are informed. You must give written, informed consent for the radiographer or nurse to administer the contrast to you.

If you are not willing to have contrast, the test may still be performed. However you must be aware that the information from the examination may therefore be limited.

**What are the risk factors for getting a contrast agent?**

Unfortunately, there is no way of predicting who will be allergic to contrast until it is given.

A patient who becomes allergic will usually develop their symptoms within 10 minutes, and typically within the first one or two minutes. Patients who are at high risk of an allergic reaction include diabetics, asthmatics, patients with renal issues and patients with a history of allergies.

It is very important that you tell the radiographer if you have any of the risk factors above.

It is also very important to tell the radiographer if you are pregnant or breast feeding, as the contrast may have an impact on your baby.