Fluorescein Angiography

What is Fluorescein Angiography?
This test uses a special camera to take pictures of the retina, the nerve layer on the inside of the eye. This helps eye doctor to find and treat problems that affect this part of the eye. This test does not use x-ray or radioactive tracers.

Fluorescein angiography is performed thousands of times a day, every day, in the United States by Ophthalmologists and Optometrists.

Why is it done?
Fluorescein angiography may be done:
• To find out if there is a problem in the retinal area, if the doctor suspects a problem after an eye exam.
• To follow the course of retinal problems caused by diabetes (diabetic retinopathy). Diabetes is the leading cause of blindness in patients under the age of 65. It can cause the blood vessels of the retina to leak blood into the retina. In time, this leakage can damage the vision. In some cases, these abnormalities can be treated with laser to help prevent loss of vision.
• To follow other retinal diseases, such as age-related macular degeneration. This is the leading cause of blindness in patients over the age of 65. In some cases there is no treatment. But in other patients, small blood vessels can be seen under the retina, which will bleed if allowed to grow. If caught early enough, this can be treated with laser to help prevent severe visual loss.
• To give the doctors a “road map” to guide where laser treatment should be applied.
• To monitor treatment results after traditional surgery or laser surgery.

How is it done?
A special dye (fluorescein) is put into a vein in the arm or the hand. The dye is then picked up by the bloodstream and travels throughout the body. As the dye passes through the blood vessels of the retina, the camera is used to take pictures of these blood vessels. If the blood vessels are abnormal, the dye may leak into the retina or stain the blood vessels. This causes the abnormal areas to stand out clearly.

What are the risks of fluorescein angiography?
• Some people have slight nausea during the test. This usually lasts only a few seconds and should not interfere with the results of the test.
• After the fluorescein dye is injected, your skin may turn yellowish for several hours. This color slowly fades as the dyes are filtered out of the body by the kidneys.
• Before the dye is removed by the kidneys, your urine will turn dark orange or bright green for up to 24 hours after the test. This is normal and should not cause concern.
• When the dye is put into your vein, if any leaks out you may feel burning or see a yellow stain in the skin. The burning usually lasts only a few minutes, and the staining goes away in a few days. In rare cases, a sore may form in that area.
• There are very few serious side effects, and we take every precaution to avoid them. Allergic reactions to the dye are rare. If they do occur, they may cause a skin rash, hives or itching. This is usually treated with antihistamines as needed. Severe allergic reactions (anaphylaxis) can occur and be life threatening but fortunately this is very rare.

If you have questions or need more information, please talk with your doctor.