

Fluorescein Angiography

Fluorescein angiography, a clinical test to look at blood circulation inside the back of the eye, aids in the diagnosis of retinal conditions associated with diabetes, age-related macular degeneration, and other eye abnormalities. The test can also help follow the course of a disease and monitor its treatment. It may be repeated on multiple occasions with no harm to the eye or body.

Fluorescein, a harmless orange-red dye, is injected into a vein in the arm. The dye travels through the body to the blood vessels in the retina, the light-sensitive nerve layer at the back of the eye. A special camera with a green filter flashes a blue light into the eye and takes multiple photographs of the retina. The technique uses regular photographic film. No X-rays are involved.

If there are abnormal blood vessels, the dye leaks into the retina or stains the blood vessels. Damage to the lining of the retina or atypical new blood vessels may be revealed as well. These abnormalities are determined through a careful interpretation of the photographs by an ophthalmologist.

The dye can discolor skin and urine until it is removed from the body by the kidneys. There is little risk in having fluorescein angiography, though some people may have mild allergic reactions to the dye. Severe allergic reactions have been reported but very rarely. Being allergic to X-ray dyes with iodine does not mean you'll be allergic to fluorescein. Occasionally, some of the dye leaks out of the vein at the injection site, causing a slight burning sensation that usually goes away quickly.