

Angiography: An advanced technique to treat heart diseases.

Sabena Cartoon*

Department of Genetic Engineering, College of Biotechnology, Al-Qasim Green University, Babylon 00964, Iraq

Accepted on 16 November, 2021

About the Study

Angiography or arteriography is a technique which is used to observe the inside, or lumen, of blood vessels and along with organs of the body, with particular interest in the extracellular, intracellular, and the heart chambers. This is traditionally done by fitting a radio-opaque discrepancy agent into the blood flow vessel and imaging using X-ray analytical ways similar as fluoroscopy.

The film or image of the blood vessels is called an angiograph, or further generally an angiogram. Though the word can describe both an arteriogram and a venogram, in everyday operation the terms angiogram and arteriogram are frequently used synonymously, whereas the term venogram is used more precisely.

Technique

Depending on the type of angiogram, access to the blood vessels is gained most generally through the femoral pathway, to look at the left side of the heart and at the arterial system; or the jugular or femoral tone, to look at the right side of the heart and at the venous system. Using a system of companion cables and catheters, a type of discrepancy agent (which shows up by absorbing the X-rays), is added to the blood to make it visible on the X-ray images.

The X-ray images taken may either be still, displayed on an image intensifier or film, or stir images. For all structures except the heart, the images are generally taken using a fashion called digital deduction angiography or DSA. Images in this case are generally taken at 2 – 3 frames per second, which allows the interventional radiologist to estimate the flux of the blood through a vessel or vessels. This fashion "subtracts" the bones and other organs so only the vessels filled with distinction agent can be seen.

After the procedure has been completed, if the femoral fashion is applied, the point of arterial entry is either manually compressed, stapled seal, or stitched in order to help access-point complications.

Coronary Angiography

One of the most common angiograms performed is to visualize the blood in the coronary arteries. A long, thin, flexible tube called a catheter is used to administer the X-ray contrast agent at the desired area to be visualized.

Coronary angiography can visualize coronary artery stenosis, or narrowing of the blood vessel. The degree of stenosis can be determined by comparing the width of the lumen of narrowed segments of blood vessel with wider segments of adjacent vessel.

To detect coronary artery disease, a CT scan is more satisfactory than an MRI scan. The sensitivity and specificity between CT and MRI were and respectively. Therefore, CT is more accepted, more widely available, more favored by patients, and more economic. Moreover, CT requires shorter breath-hold time than MRI.

*Correspondence to

Dr. Sabena Cartoon,

Department of Genetic Engineering and Cardiology,

College of Biotechnology,

Al-Qasim Green University,

Babylon 00964,

Iraq

E.mail: Sabena carto@hotmail.com

Citation: Cartoon S. Angiography: An advanced technique to treat heart diseases. *J Cholest Heart Dis.* 2021;5(1):5.