

# [Ct angiography](https://assignbuster.com/ct-angiography/)

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Content This research seeks to investigate what is a Computed Tomography Angiography (CTA). This study is vey important because, this is a medical issue that affects the lives of the human species. There have been various research carried out by individual researchers as well as other institutions on this topic.

The scholars have more or less agreed about my topic, and my paper argues for a better interpretation. Methodology The methodology used in this study is that of a comparative case study. This study utilizes the benefits of using comparative case studies in the topic of discussion. This is due to the fact that information dealing with the research topic is in abundance. By looking on previous researches and studies, it ascertains the facts that are already in the field.

Research findings The research has established that CT Angiography is a less invasive medical test, which helps physicians in diagnosing as well as treating other medical conditions. It uses one of the three imaging technologies. In some cases, a contrast material is also used to give out pictures of major blood vessels in the body. It is important to note that, in CT angiography, computed tomography with a contrast material is injected into a peripheral vein so as to give out detailed images of tissues as well as blood vessels. Physicans use this procedure in a number of ways. Firstly, they use it in identifying aneurysms and disease in the aorta or other major blood vessels.

They also use it in detecting atherosclerosis disease. This disease limits the blood flow to the brain and may end up causing a stroke. It can also be used in identifying arteriovenous malformation or a small aneurysm in the brain. More over, it can detect atherosclerotic disease as well as any disease in the arteries or kidneys. The procedure can also guide surgeons and interventional radiologists in making repairs to any diseased blood vessel.

In addition, CTA can detect injury to one of more arteries in the chest, neck, abdomen or any extremity in trauma patients. CTA can evaluate any artery that feeds a tumor before surgery or other procedures like selective internal radiation therapy or chemoembolization. It is used in identifying splitting in the aorta in the chest, abdomen or in major branches. It can also be used in examining pulmonary arteries in the lungs so as to detect blood clots from leg veins, as well as in sampling blood from veins in the body so as to detect any endocrine disease. CT scanning works just like other x-ray examinations.

This research has established that there are benefits that are associated with Angiography. Firstly, it may eliminate the possibility of performing a surgery. However, if surgery is necessary, then it can be performed more accurately. Secondly, CT angiiography can detect the narrowing of blood vessels in time so as corrective therapy can be applied. More over, the procedure gives anatomical detail, which is more precise, of blood vessels than MRI (Mahesh 2007). CT Angiography is much less invasive when compared to other procedures like catheter angiography.

The other benefit is that there is no radiation which remains in the body of a patient after a CT examination. It is also important to note that, more often than note the x-rays used in CT scans have no immediate side effects. On the other hand, some of the risks involved include; a minimal chance of cancer when exposed excessively to radiation. Pregnant women should always consult with their physician and x-ray or CT technologist. It is also advisable that nursing mothers wait for 24 hours after being injected with contrast material before going back to breast-feeding.

Conclusion In conclusion, CT Angiography is a good medical procedure but has various limitations. Those individuals who are large enough may not fit into the conventional CT scanner’s opening or may surpass the weight limit for the table (Mahesh, 2007). In addition, the procedure should be avoided in patients with severe diabetes or advanced kidney disease. This is due to the fact that x-ray contrast material can harm the functions of the kidney. However, the benefits of this procedure outweigh the risks involved.