

The fluoroscopy essay sample



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The beginning of fluoroscopy can be taken way back in the 90s when there wasn't much technology. This was all discovered by Rontgen, who noticed a fluorescing screen during the exposure to what was later called x-ray. Back then many people were wrong after coming up with conclusions that fluoroscopy would completely replace x-ray after knowing that in fluoroscopy there was movement available in the process. In fluoroscopy, a machine is used. One that can use either a continuous beam or it can do a pulsing x-ray beam.

This machine used in fluoroscopy generates a high amount of electricity that creates a stream of electrons that are then transferred to the tungsten target making the structure of the tungsten stop the electrons and causing x-ray energy. Then the energy passes through the tube and sends it against the patient body part. These energy waves can pass through the body and create images of the anatomy of the inside of the body. As that is being done the equipment makes an image in a video format using two dimensional patterns of light. Thanks to all this we are able to see or obtain an image in video format of our inside organs.

Beside this machine there is also mobile fluoroscopy, which is better in the way that you are able to move it around and take it anywhere you want. Thanks to how fast technology is moving fluoroscopy equipment are getting better and better, it also improves the accommodation of all the physicians that use any type of fluoroscopy equipment. How this work is really easy, all physicians who use this resource are able to obtain a very good accurate reading of what they are looking for, meaning a disease, abnormal movement, or any damage joints.

Since the beginning of fluoroscopy many opinions were wrong about how fluoroscopy was going to replace the diagnostics of x-ray. But after research and technology moved on everyone started noticing that they were wrong about their opinions. Knowing that radiographic diagnostics have better quality than fluoroscopic images, doesn't mean that fluoroscopy is worst. They both have their good and bad sides. One of the top reasons they are not alike is that using fluoroscopy the patient is receiving a less amount of radiation exposure, compared to conventional radiography is getting up to an extra 50 percent of radiation.

Due to the more use of radiation in conventional radiography we are able to obtain a high contrast with very fine and precise details of the structure of the patient. When in fluoroscopy we obtain a very high quality of the movement of structures and also important fluids such as blood flow. They both carry the same type of risk due to the radiation that is being used depending on the procedures that are being taken, causing radiation to burn skin tissues and creating a possibility of developing a cancer some time later in life. But like every bad thing has its opposite side fluoroscopy and conventional radiography have their good benefits.

One of the major ones would be in obtaining a view of a patient's disease or abnormality. It is also very important to keep that radiation away from pregnant women. All because it affects them a lot, this is why consultation would be necessary before receiving all that radiation. They both obtain differences between themselves in a lot of ways, but also are similar in others. Due to the advanced technology physicians are able to determine what is needed depending on the procedures that will be taken. Normally conventional

radiography is primarily use for the visualization of the bones and to obtain high quality images of different fractures.

As we know fluoroscopy takes and displays several images of the inside of our body per seconds. This makes a live moving picture of the patient inside structure that specialize doctors can use to see specific signs and symptoms condition that a patient may have. Is like if doing fluoroscopy to a patient is having a live movement of everything that's going on. Is one of the primary use to obtain moving images of the function of our body parts and even the flow of our blood. Just like conventional radiography has its own test, fluoroscopy has its uses as well.

Thanks to research that has been made we have determined the exact when we need to use the technology of fluoroscopy. One of the most important uses we give it is the blood flow. Sometimes technicians need to obtain a clear visual of how the blood is circulating inside the patient's body. Using fluoroscopy they are able to obtain images moving in seconds making it a clear movie of any movement. In the past years physicians have come to a really good point, which has been using fluoroscopy for surgeries. Due to this outcome many surgeries have succeeded and giving the greatest results for the patients.

Also using this method for surgery lets the surgeons know how many hardware is needed for which ever procedure that will be taken and it also lets them know exactly how to perform every step. Thanks to technology we have come to conclusions that fluoroscopy is an advanced system that can help physicians and doctors determine their needs. Even though the

radiation been used can cause damage to the patient such as creating cancer or burning the tissues, it has come to the decision that less radiation and exposure time has to be use to obtain any type of important information of the patient no matter what type of disease that patient occupies.