
Name *	Sarah Dailey
Email *	sarah-dailey@uiowa.edu
Educational Level *	Undergraduate
If Selected Other	
College *	College of Medicine
Department *	Radiology
Title of Research *	Scoliosis
Other Authors *	N/A
Introduction & Purpose *	<p>The purpose of this research is to inform its readers about the spinal deformity scoliosis. Scoliosis is a lateral curvature of the spine and can be categorized into many different groups. This research first discusses the basic anatomy of the human spine and the origins of the disease. It also presents what the disease is capable of doing to the patient in a variety of cases. Most importantly, radiation science is discussed to relate how crucial radiographic imaging is in scoliosis cases. To wrap things up, treatment methods are discussed depending on the extent of the curving spine.</p>
Experimental Design *	<p>I have researched historical methods of treatment for scoliosis through present day. I have looked into different forms of radiography from the plain film x-ray, to the EOS machine imported from France. I have seen one of the very few EOS machines in the United States. I have also looked into forms of braces and physical examinations used for diagnosis.</p>
Results *	<p>I have come to find that with radiographic imaging, doctors can discover, diagnose, and have a reliable aid in scoliosis surgeries. Historical treatments were respectfully considered for a long time. Today, there are several new technologies that help discover the curvature of the spine. Breaking down to the basic anatomy of the spine, one can learn a lot about how scoliosis forms and how it is treated and monitored and I have done so by explaining what I have found through my research.</p>
Conclusions *	<p>Scoliosis is a very challenging disease to live with. By understanding the severity and hardships that come as a result, one can understand the importance of diagnosing, evaluating, and monitoring the condition. Radiation science is very essential in scoliosis cases and is the determining factor for analysis and treatment. Without imaging, there would be no specific discovering, surgical aid, nor efficient monitoring. Radiation science has been very beneficial and a blessing in the medical field in so many ways. Many people just have basic knowledge and shallow expectations about scoliosis.</p>
