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Abstract

Effect of 3D Printers in the Future of Radiology and Imaging

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Abstract

Today Radiology and imaging are the only and main method to generate geometrical data from body. 3D model of the body will give us the best and reliable information for better understanding and diagnostic. On the other hand with development of CAD/CAM and Rapid prototyping, the 3D printers were born to build 3D models without considering the geometry. Today the 3D printers are able to makes a 3D physical model from complicated membrane in less that 2 hours in low cost. 3D physical model of hard tissues like skull, vertebra, MSK and etc. as well as soft tissue like heart can be built using 3D printers. Now, a new discussion for future of radiology will be opened: does a radiologist make the 3D physical model using 3D printer in near future? Is the 3D printer replaced with printed report of radiology? 2D images, 3D images or 3D physical models (3D printed model) are the most advantage for diagnostic?

Keywords: 3D Printer, Stereo Lithography, Rapid Prototyping, CAD/CAM

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