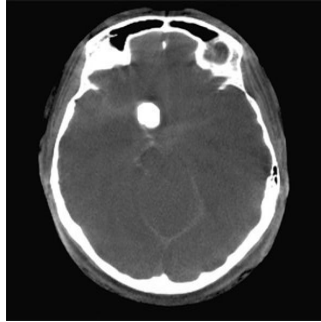

RSNA 2014: Siemens Introduces New Applications For Angiography



Siemens Healthcare will be presenting two new clinical applications for angiography at the 100th Annual Conference of the Radiological Society of North America (RSNA) in Chicago.

For the first time, Syngo Dyna4D will enable time-resolved 3D imaging in angiography, making it possible to visualise not only the three-dimensional volume of the vessels, but also the flow behaviour of blood. Syngo DynaCT Smart removes metal artefacts and allows physicians to detect bleedings close to metallic objects.

Time-Resolved 3D Imaging in Angiography with Syngo Dyna4D

Siemens Healthcare has developed innovative angiography software. As compared to current 3D image acquisition methods, Syngo Dyna4D uses a modified protocol, which makes it possible to combine spatial and temporal resolution ("3D+t"). Siemens is the first company to successfully make the fourth dimension visible, enabling the physician to track the passage of contrast medium in real time, and precisely see how quickly and to what extent the patient's vessels are filled. With this new application, therapy can be more precisely adapted to the individual patient.

According to Prof. Charles M. Strother, MD, from the University of Wisconsin School of Medicine and Public Health, "by allowing any view to be seen at any time and any time in vascular filling to be seen in any view, there will be a decrease in the need to obtain 2D-DSA studies. This will reduce both radiation exposure and contrast dose for the patient."

Prof. Strother also points out that with Syngo Dyna4D, it is now possible to evaluate the dynamics of blood flow pattern in a 3D reconstruction of complex abnormalities such as AVMs and AVFs. This can contribute to enhanced treatment planning and enhanced evaluation, and can increase the ability to recognise the presence of intra-nidal aneurysms, direct artery to vein fistula and venous outflow obstructions. This increased capability will help assess the risks of haemorrhage and choose patients that are best suited for endovascular therapy.

Removing Metal Artefacts with Syngo DynaCT Smart

Metal objects in the body, such as surgical clips or coils like those used in aneurysm therapy, cause massive streak metal artefacts to occur in CT or CT-like imaging as delivered with Syngo DynaCT. This makes it impossible to analyse the areas around such metal objects for diagnostic purposes.

Syngo DynaCT Smart removes streak artefacts caused by metal from the image, and visualises the regions in close vicinity of the metal in a diagnosable manner. The quality of the image is much more improved, reducing the probability of erroneous decisions as well as the need for additional postoperative exams and hospital readmission.

Both these applications will be available from summer 2014 for Artis systems with the new "Pure" platform for Artis zee, Artis Q and Artis Q.zen by Siemens Healthcare.

Source: Siemens

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Published on : Sun, 30 Nov 2014