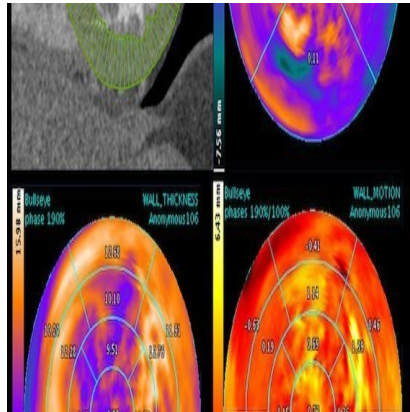




RSNA 2013: GE Healthcare Premieres Revolutionary One Heartbeat CT



Revolution CT to give clinicians a test that gives them outstanding image quality and reduced dose exposure for patients.

GE Healthcare, a unit of General Electric Company announced at this year's Radiological Society of North America's Scientific Assembly and Annual Meeting in Chicago, Illinois that its 510(k)-pending Revolution CT[^] has captured a motion free image of the human heart in just one beat.

This groundbreaking technology allows clinicians to non-invasively visualise the human heart more clearly than previously achievable, and diagnose more patients with erratic or high heart beats.

According to literature published in the British Journal of Radiology, the majority of patients referred to cardiac CT (>60%) percent display heart rates higher than 60 beats per minute, and some are turned away from being scanned. With Revolution CT, clinicians can clearly visualise particular heart areas previously compromised either by a high heart rate, a patient's movement, or a child's inability to hold their breath.

Dr. Ricardo C. Cury, chairman of Radiology and director of Cardiac Imaging at Baptist Health South Florida was able to capture the unprecedented images, and according to him, the choice previously imposed to physicians on whether to utilise CT systems with wide coverage, high spatial resolution (clear image), or high temporal resolution (speed) becomes obsolete. GE Healthcare's Revolution CT converges these three technology advances into one CT system, a global innovation.

Describing it as an all-in-one scanner, Cury went on to say that the Revolution's impressive ability to combine coverage, spatial and temporal resolution in a single device will lead the way for future applications. Dr. Cury served as principal investigator for this study, which was conducted in collaboration with West Kendall Baptist Hospital (WKBH), where investigational clinical images demonstrating the scanner's capabilities were obtained.

In a cost-constrained healthcare environment, clinicians need one definitive test that gives them the diagnostic confidence to make the right treatment decision for their patients. makes this possible through the convergence of spatial resolution, temporal resolution, coverage, and low dose all-in-one, providing uncompromised image quality and clinical capabilities.

Following advanced clinical exams are now made possible via the convergence of technologies in GE Healthcare's Revolution CT:

- Comprehensive cardiac exams with anatomic and functional information in just one heartbeat, even with challenging patients and higher heart rates

- Rapid, whole-brain stroke assessment at low dose
- Dynamic liver, kidney, or pancreas oncology workup personalized with perfusion and vascular flow analysis

The devices' engineering advances include the 16 cm Gemstone* Clarity detector for whole organ coverage, best-in-class spatial resolution at 230 microns for visualizing small anatomy, and a 0.28 second gantry designed and tested for up to 0.2 sec rotation speed. Combined with SnapShot* Freeze motion correction technology, the system delivers 24 msec effective temporal resolution for high heart rate imaging without restrictions.

This new addition to the company's portfolio continues GE's commitment to even lower CT doses, while providing the patient with a wider, more comfortable 80cm bore and a quiet scanning experience via the new Whisper Drive system. Ultra-fast scanning with streamlined workflow makes it a perfect scanner for emergency rooms. Enhanced usability is secured through the innovative interface based on inputs from hundreds of clinicians and technologists around the world.

Steve Gray, president and CEO of MICT & AW for GE Healthcare emphasised the global appeal of the product as being the first CT scanner appropriate for everybody in every clinical specialty, able to scan even the most challenging patients routinely with remarkably clear images in a productive, logical, and intuitive manner.

Source: [Business Wire](#)

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