Medical Systems

Toshiba is developing medical equipment/systems, which are of course friendly to both doctors and patients and help to provide high quality diagnosis and treatment, but which also help to improve the efficiency of hospital management.

Aquilion™/Advanced-Multi Whole-Body X-Ray CT Scanner

The Aquilion™/Advanced-Multi whole-body X-ray CT scanner

Toshiba has developed and released an X-ray CT (Computed Tomography) scanner permitting simultaneous acquisition of 16 slices per single rotation. The major features are described below.

This system permits simultaneous 16-slice acquisition per 0.40 second rotation. Helical scan time is 1/4 or less than that of a 4-slice CT scanner for the same region. The system reduces the time that the patient must remain on the couch and improves patient throughput in CT examinations.

This system employs a detector that allows a slice thickness of 0.5 mm, and the helical reconstruction technique TCOT (True Cone-beam Tomography) that precisely compensates for the cone angle, thus providing accurate, high-resolution isotropic images over the entire imaging field.

The 0.40 second ECG (Electrocardiogram) -gated scanning and reconstruction function is particularly effective for cardiac examinations. Wall motion analysis and functional parameter calculations are supported for cardiac function analysis. The Aquilion™ achieves real effective cardiac examinations with the X-ray CT scanner.

3D images of chest and heart (Courtesy of Fujita Health University)

Aplio™50 SSA-700A Diagnostic Ultrasound System

The Aplio™50 SSA-700A diagnostic ultrasound system

The high-end Aplio™50 diagnostic ultrasound system, which features an excellent cost/performance ratio, has been developed.

The Aplio™50 is intended for general and cardiac applications (abdomen, cardiology, obstetrics, gynecology, peripherals, and so on), and has the following features:

- Highest quality B-mode images
- Excellent expandability to support advanced optional application software such as Fusion 3D (which represents parenchymal organs and blood vessels in 3D to help morphological comprehension of the organs and lesions) and Dynamic Flow™ (which displays blood flow information in real time at high resolution and sensitivity)
- User-friendly and sophisticated user interface
- Support for DICOM (Digital Imaging and Communication in Medicine: standardization of medical data) protocols, ensuring that the Aplio™50 is ready to connect to hospital networks.

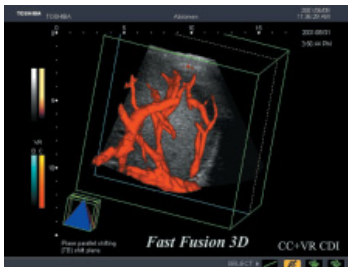

Image obtained by Fast Fusion 3D

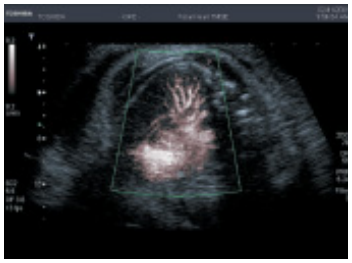

Image obtained by Dynamic Flow™