



SARAVANA SCANS

Advanced Medical Imaging Centre Run by an Expert Radiologist

Brings to you for the **1st** time in Tamilnadu

SOMATOM **Definition AS+ Excel** with SAFIRE and Dual Energy

Most advanced Multi Slice Spiral CT Scanner with **Cardiac Capability**
and new Dual Energy applications



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Other Facilities





Cardiac Imaging

Coronary angiography

- Excellent visualization of stenosis
- Calcified & soft plaque evaluation
- Stent evaluation
- Significant reduction of stent struts & blooming artifacts
- Evaluation of malignant RCA
- Evaluation of myocardial bridge
- Post CABG evaluation
- Triple rule-out
- Myocardial infarction, aortic dissection & pulmonary embolism, all three can be completed with a single injection of contrast in 12 seconds

World over, there is an alarming rise in the number of heart patients each year. With today's fast paced lifestyles, the stress levels our heart undergoes are increasing. Thus necessitate availability of better cardiac diagnosis to ensure better treatments & faster recovery.

Dual Energy scan provides diverse information, which allows the physician to differentiate, characterize, isolate, and distinguish the imaged tissue and material.

With a focus on the above, we have installed a world-class technology from Siemens, SOMATOM Definition AS+ 128 slice -most advanced Multi Slice Spiral CT Scanner, a CT diagnostic system with cardiac and Dual Energy capability.

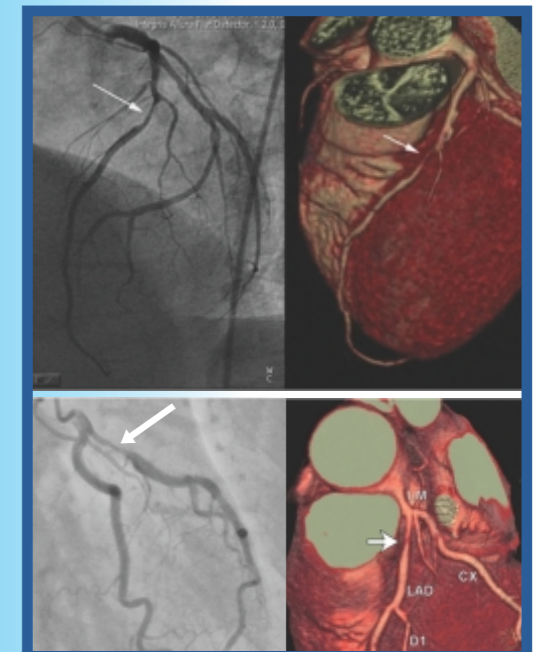
- All routine and advanced applications for clinical practice
- State-of-the-art cardio-vascular imaging
- Advanced Dual Energy applications
- High-speed whole body coverage at highest spatial resolution
- Pediatric and bariatric CT imaging with virtually no patient exclusion
- Most comprehensive low dose CT - Very low exposure to radiation, almost 66% less than other CT scanners



Artifact free visualization of the coronaries to rule out stenosis



Coronary CTA 4D valve plaque



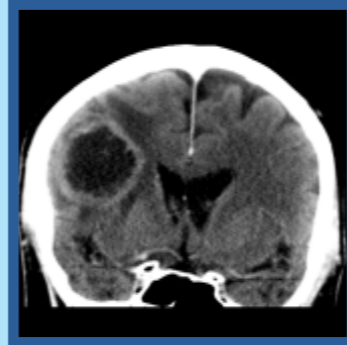
Cath Angio

CCTA

Complete Correlation of CT Coronary Angiography with Cath Lab Angiography images

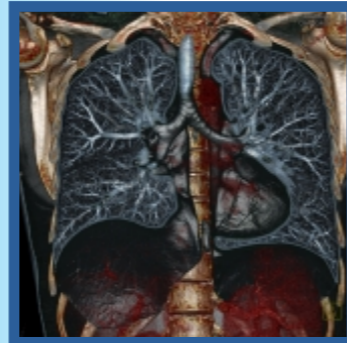
Head and Neck Imaging

- Previously unseen artifact free visualization of posterior fossa, teeth & bone structures
- Excellent sagittal & coronal images help in effective treatment planning
- Superior demonstration of inner ear structures
- Excellent details of intracranial arteries, Circle of Willis and cerebral venous system
- Stroke evaluation
 - Early differential diagnosis of acute ischemic stroke
 - Simultaneous calculation of perfusion parameters
 - Assessment of “tissue at risk”
- Brain tumor evaluation
 - Fast quantitative evaluation of brain tumor perfusion
 - Additional imaging of extravascular leakage
 - Optimized automated workflow



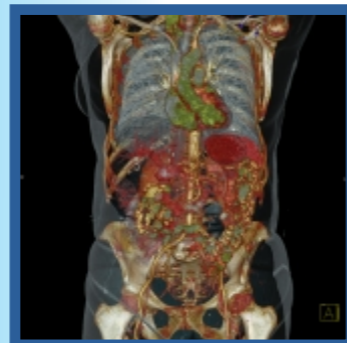
Thorax Imaging

- Complete visualization of bronchial tree
- Excellent visualization of lung structures, mediastinum and intercostal arteries
- Excellent visualization of all thoracic structures, smaller vessels & heart
- Single stretch coverage of thorax, abdomen & pelvis
- High resolution thorax images giving finest details
- Virtual bronchoscopy along with magnificent coronal & sagittal images ensures accurate treatment planning



Abdomen Imaging

- Three phase CT scan of liver
- Direct coronal & sagittal images combined with virtual colonoscopy facilitates better planning for surgery
- Complete elimination of movement artifacts due to breath holds
- Accurate assessment of pancreatic tumor, stomach & colon tumor
- Precise evaluation of liposarcoma
- Excellent visualization of whole abdominal & renal structures



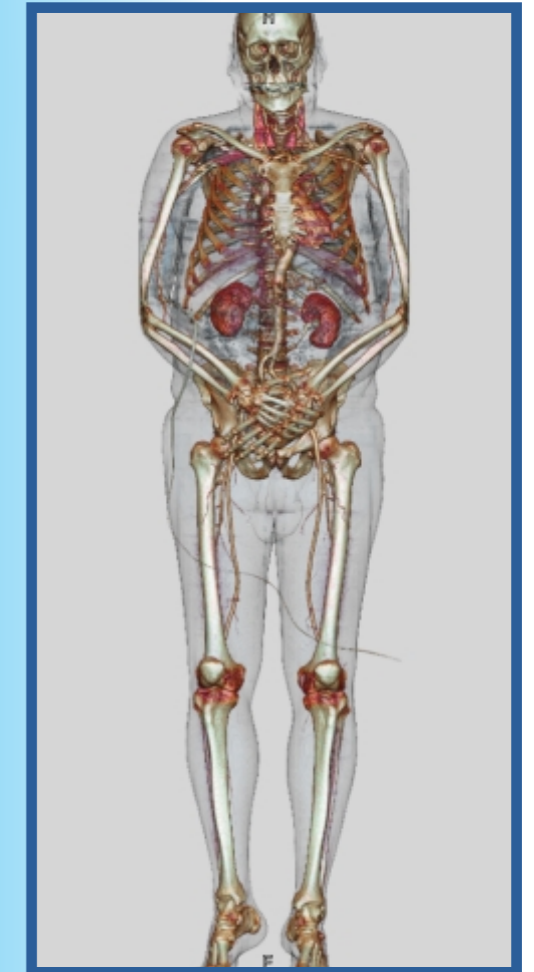
Musculoskeletal Imaging

- Previously unseen CT myelo images
- Ultra high resolution images of ankle & wrist joint ensures detecting miniature fractures & planning effective surgery
- 3D evaluation of bones and joints – hip, knee, shoulder, elbow, wrist, ankle, TMJ (temporomandibular joints) and other facial bones
- Artifact free imaging of bones with metal implants helps in post surgery monitoring
- Excellent visualization of whole spine
- Accurate assessment of degenerative changes in the vertebrae



Vascular Imaging

- Whole body angio in less than 20 seconds
- Make accurate treatment decision with pure arterial phase imaging & no venous contaminations
- Metal artifact free imaging gives possibility to evaluate stents & grafting
- Highest available resolution enables imaging muscle tissue detail & distal mesenteric vasculature
- Excellent visualization of aortic arch aneurysm, aortic saccular aneurysm & all aortic arch anomalies
- Magnificent imaging of all abdominal & femoral arteries with clear visualization of distal branches



syngo Dual Energy Calculi Characterization

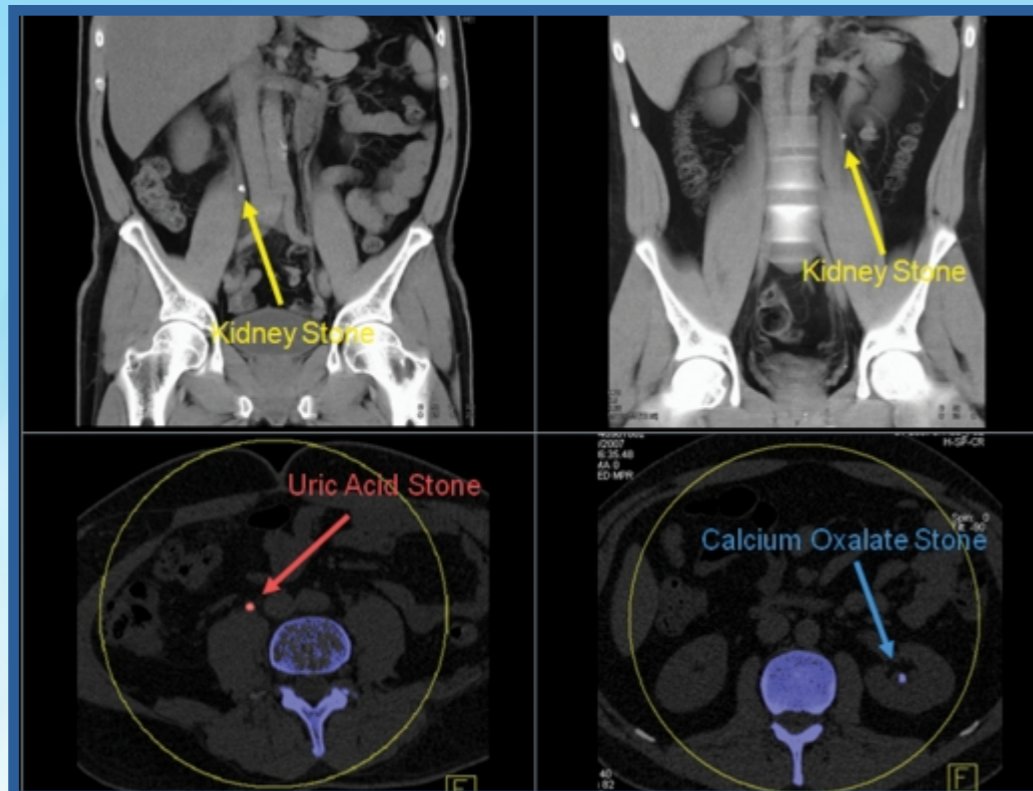
This Dual Energy application visualizes chemical differences in kidney stones. Basis for this approach is a material decomposition into uric acid and other stone types.

Challenge without Dual Energy :

- Conventional CT can detect only calculi but does not offer information on stone types.
- Patients may need to undergo painful, as well as expensive, interventional procedures with the risk of complications, even if the stone could be dissolved medically.

Solution with Dual Energy :

- Dual Energy makes it possible to differentiate uric acid stones from other stone types.
- Dual Energy CT can identify those patients who can benefit from medical treatment alone and avoid unnecessary interventional procedures and costs.



syngo Dual Energy Gout

Dual Energy CT offers a simultaneous data acquisition at two different X-ray energy levels which makes it possible to classify the elementary chemical composition of the tissue. With this technique, an accurate and specific identification of uric acid crystals in joints affected by gout is possible.

Challenge without Dual Energy :

- The diagnosis of gout requires a microscopic analysis of joint fluid.
- Joint fluid aspiration for the diagnosis of gout is invasive, prone to complications, time consuming as well as challenging with acutely inflamed joints.
- The specificity of the clinical diagnosis of gout is limited.

Solution with Dual Energy :

- Dual Energy CT provides a quick, definitive and non-invasive diagnosis of gout.
- It surpasses the sensitivity of other clinical examinations.
- It detects gout in sites that are often overlooked, and distinguishes gout from similar diseases.

