

Best MR Image 2008

As every radiologist has his or her specific area of interest, each individual creates protocols that are optimized to match these interests. In order to share this experience with colleagues, Toshiba wanted to invite customers to contribute their selected cases, enabling us to distribute these ideas on optimal imaging techniques with other and future Toshiba Vantage MR users. In April 2008, Toshiba Medical Systems Europe therefore asked all customers in Europe to share their high-quality MR images or interesting clinical cases for

The MR Image of the Year 2008

Toshiba combined a contest with this process, awarding prizes to the Best MR Image as well as to the best combination of highest quality images and the most interesting case. All our users had to do was send us up to ten of their best cases/images.

Toshiba received over 100 entries from different European countries and 20 cases were shortlisted.

An international selection committee reviewed the entries and chose the Image of the Year 2008 as well as the top five combinations of high-quality images and cases.

The Image of the year 2008 was entered by the **Centre d'imagerie Medicale du Bois de Verrières, Antony**

The other five winners were from

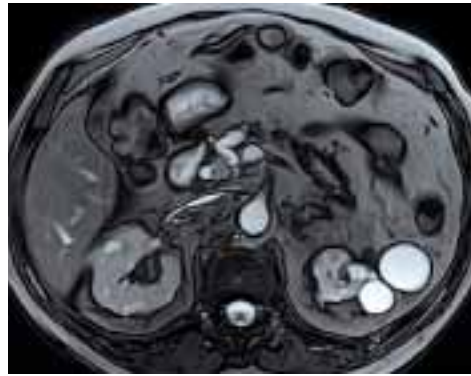
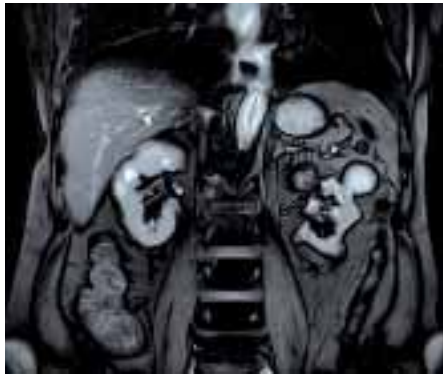
- GIE Var Ouest, Ollioules, France (2x)
- Institut für digitale Bilddiagnostik, Liezen, Austria
- Polyclinique des Longues Allées, St Jean de Braye, France
- Vista Diagnostics, London, United Kingdom.

Centre d'imagerie Medicale du Bois de Verrières, Antony

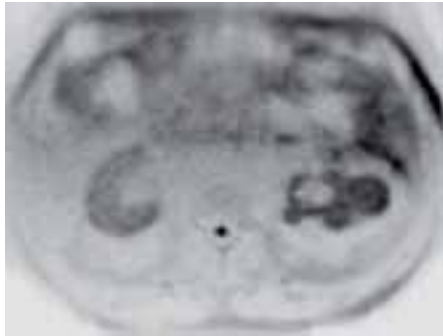
A MIP of a coronal Time-SLIP image showing a significant stenosis on the left renal artery with a post-stenotic dilation of the artery. The image was acquired on a Toshiba Vantage System with the following parameters:

| Time-SLIP (SSFP) | |
|----------------------|--------------|
| TR/TE/TI (ms) | 5.2/2.6/1400 |
| FA | 120 |
| FOV (mm) | 40 |
| Acquisition matrix | 256 x 256 |
| Slice thickness (mm) | 2 |
| Number of slices | 72 |
| NAQ | 1 |
| SPEEDER factor | 2 |
| Gating | respiratory |

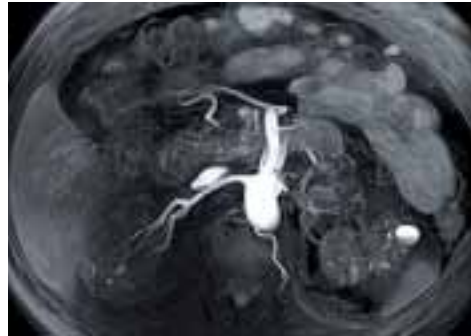




Coronal and axial SSFP images showing an atrophic left kidney and numerous cysts on both kidneys, but mainly on the left side



Diffusion weighted image (grey scale inverted)



MIP of the Axial Time-SLIP images showing a significant stenosis on the left renal artery

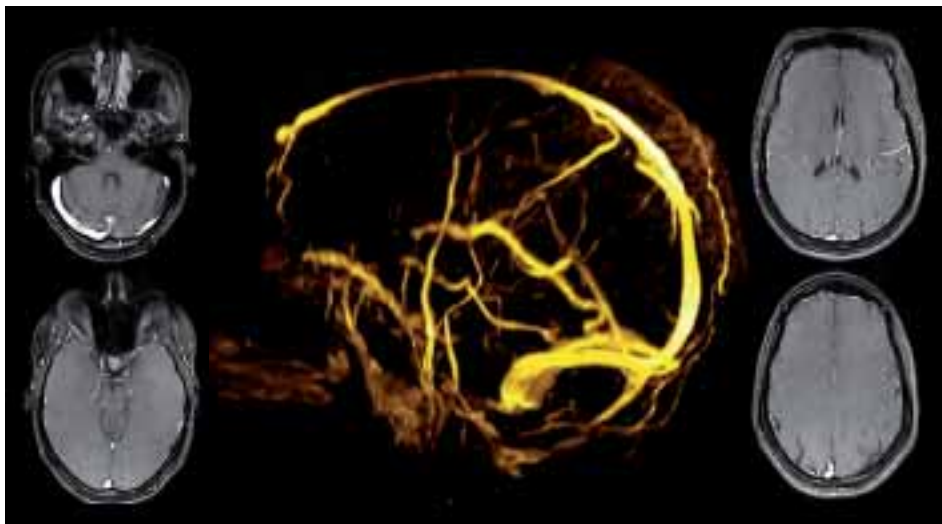


Colour-coded and reoriented MIP (coronal view) showing a higher isotropic diffusion signal (close to that of the spleen) on the left kidney compared to the right kidney

Case description: A 70-year-old diabetic patient, insulin dependent with arterial hypertension and chronic renal insufficiency (GFR = 27 ml /mn) was referred to us for a suspected renal artery stenosis in the left kidney (seen on color Doppler). The right kidney was of normal size and morphology with small benign cysts. The left kidney, however, was abnormally small with an irregular cortex atrophy and large cysts. On the Time-SLIP images a single main renal artery of the left kidney with a severe stenosis (estimated at more

than 80%), causing a severe decrease in distal flow. On the right kidney, two main renal arteries running parallel to each other form the aorta were clearly visualized up to their third branches. No abnormalities were detected on the right arteries. On the diffusion weighted image, the signal intensity of the left kidney was clearly abnormal compared to the right kidney, often a sign of malfunction.

GIE Var Ouest, Ollioules, France



A 3D TIME-SLIP SSFP image of the cerebral venous system. The image was acquired after a contrast enhanced T1 weighted image of the brain. Taking advantage of the presence of gadolinium in the blood, the Time-SLIP technique was applied leading to a complete 3D image of the venous system.

Institut für digitale Bilddiagnostik, Liezen, Austria

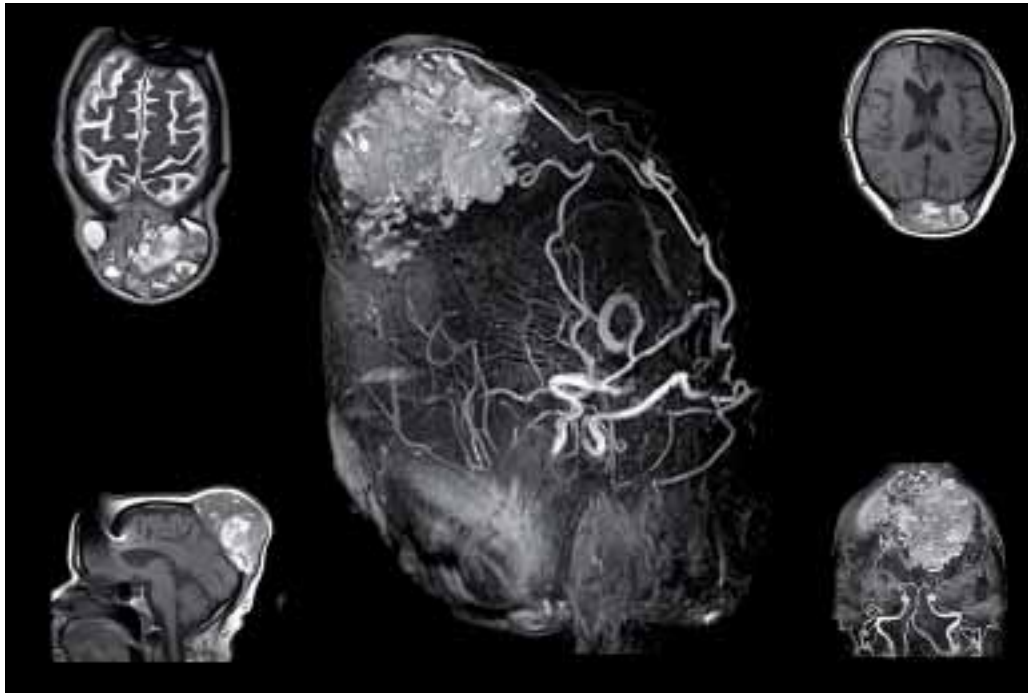


Contrast enhanced MR angiography from the aortic arch to the lower extremities was performed in three stages using large FOV. Note the severe stenosis of the fibular artery on the left side.

Polyclinique des Longues Allées,
St Jean de Braye, France

Sagittal T2-weighted Image (large FOV) showing a secondary lesion (metastasis)





3D TOF of a patient who developed a large lump on the back of his head. MRA demonstrated the blood supply to be from two occipital arterial branches of both external carotid arteries.

Body Diffusion Image:
lung cancer



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not in
your patients**

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