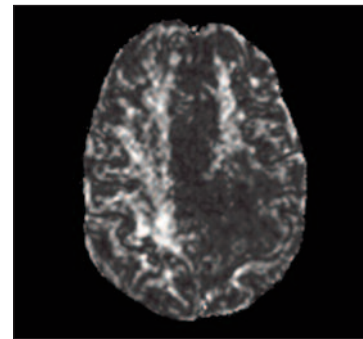


## Assessing White Matter Disease with Diffusion TensorSuite

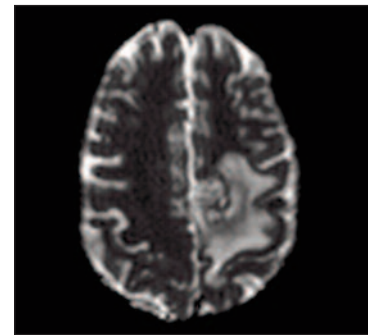
Diffusion Tensor imaging has been shown to be useful in delineating abnormalities in conditions ranging from cerebral infarction to demyelinating disease. Additional clinical applications include tumor/white matter tract localization for surgical pre-planning.

Echelon's optional Diffusion TensorSuite provides additional automation of multi-MPG axis acquisition and tensor calculation software. A single click initiates the Diffusion Tensor sequence and calculation and display of processed maps. TensorSuite includes:

- DTI Pulse Sequence
- Fractional Anisotropy Map
- Mean Diffusivity Map



Fractional Anisotropy Map



Mean Diffusivity Map

## Probing Brain Function with SpectroSuite

SpectroSuite provides an intuitive and easy to use package of acquisition features and analysis tools for MR spectroscopy. Echelon's HOAST feature promotes minimum spectral spread.

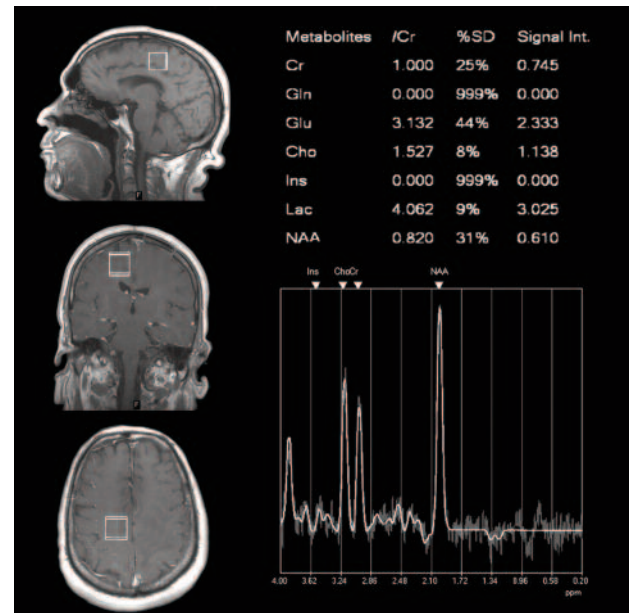
The easy to use analysis tools provide reference images with spectral graphs to identify metabolite intensities. A single click initiates the MRS sequence and calculation of graphs.

MRS Acquisition provides:

- Voxel of interest defined graphically on scout image
- Location, size and orientation of Voxel can be changed with the click of a mouse
- Dynamic display of spectra during acquisition

MRS Analysis provides:

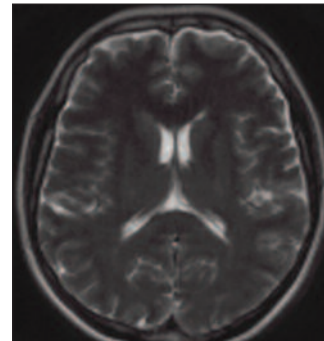
- Single click to start analysis
- Results displayed on a comprehensive single screen



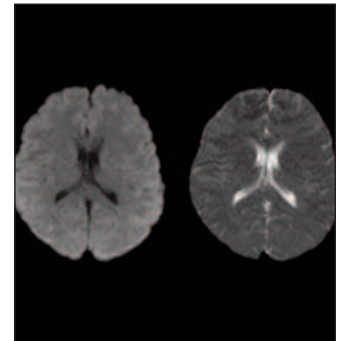
## Standard Neuro imaging features

Echelon's 150 T/m/sec slew rate gradients, RAPID™ parallel imaging, and RADAR™ patient motion compensation techniques provide a powerful basis for patient-centric evaluation of neurological disorders. Feet first positioning and Echelon's short bore assures patient comfort for greater compliance.

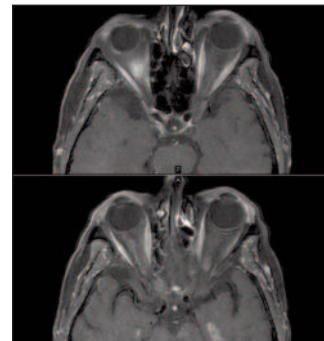
- RADAR for imaging uncooperative patients and reduction of CSF flow
- RAPID to increase resolution without scan time penalty
- BASG for high contrast delineation of the cervical cord
- Diffusion Weighted SS-EPI with seamless ADC map and isotropic DW image creation
- Higher Order Active Shim Technology (HOAST™) provides consistent uniform fat saturation
- RADAR-DWI for reduction of susceptibility artifacts
- Feet first positioning for any examination ensures patient comfort and compliance



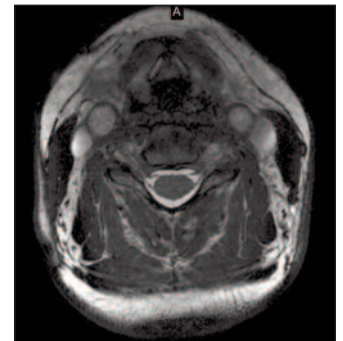
High Resolution FSE



DWI and ADC map



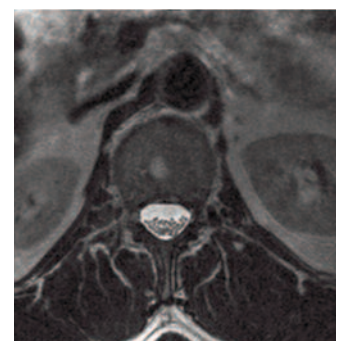
RF fat saturated orbits



Balanced SARGE



RADAR Motion Compensation

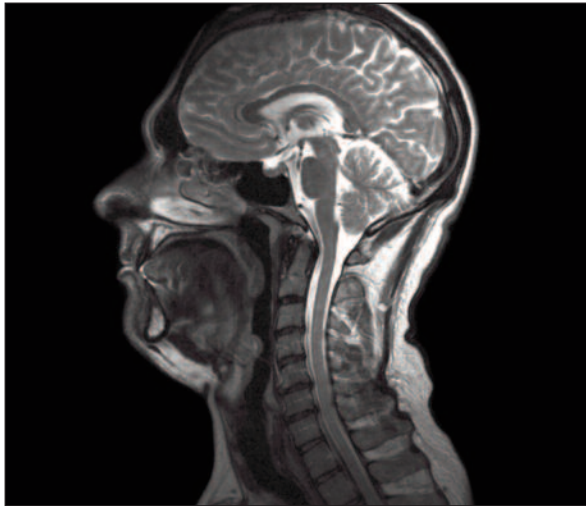


Driven Equilibrium FSE

## RAPID Neurovascular Coil

Echelon's 8-channel Neurovascular coil option provides expanded FOV coverage for aortic arch to COW vascular imaging as well as head and soft tissue neck imaging. RAPID parallel imaging capability promotes scan time and resolution flexibility.

- 8 channel design for signal uniformity
- Support head and head/neck applications
- Equipped with custom pads and a prism mirror for patient comfort



Extensive coverage with high signal and uniformity

## Advanced NeuroSuite for assessing Brain Ischemia

For assessing the ischemic brain or lesion angiogenesis, Echelon's optional Advanced NeuroSuite provides fast and flexible acquisition and post processing tools.

### Scanning Sequences

Susceptibility weighted and Spin Echo EPI sequences provide the speed and contrast probing flexibility you need.

- Multislice 2D GE EPI Susceptibility sequence for evaluation of dynamic tissue intensities
- Multislice 2D SE EPI pulse sequence for fast T2, T1, PD, or FLAIR weighted images

### Post Processing Tools

Easy to use processing tools yield Mean Transit Time, Cerebral Blood Flow and Volume maps that aid the assessment of ischemic tissue and lesion angiogenesis. Echelon's one-button scan and fast post processing technique facilitates throughput. Calculated images are DICOM exportable.

- Mean Transit Time (MTT) map
- Cerebral Blood Volume (CBV) map
- Cerebral Blood Flow (CBF) map

