

Traumatic Brain Injury: “Our Clients Need Us To Look Beyond The Conventional X-rays, CT’s, and MRI’s”

2.21.11

It is not at all unusual for an individual who has suffered a mild brain injury to have the imaging studies of his or her brain read as normal. Indeed, many healthcare providers fail to diagnose their patients' brain injuries because of this phenomenon. However, there is current technology with imaging studies to demonstrate brain damage that is not discernible by conventional x-ray, CT, or MRI. The trial lawyer representing individuals who have sustained brain injuries must have a working knowledge of this current technology.

Structural imaging, displaying the anatomy of the brain, includes x-rays, computed tomography scans (CT), and magnetic resonance imaging (MRI). While most MRI's are taken at resolutions that do not reveal any lesions in the brain, such as diffuse axonal injuries suffered in the vast majority of mild brain injuries, a higher resolution MRI, like a 3.0 Tesla MRI, may show such lesions. There also exists specialized MRI techniques that permit visualization of brain damage: (1) diffuse tensor imaging (DTI), which can show damage to the white matter of the brain, and (2) NeuroQuant, which measures and displays the volume of various parts of the brain, including abnormal atrophy.

Functional imaging studies measure and display certain functions in the brain, as opposed to the structure of the brain. Such studies include: electroencephalography (EEG), which measures the brain's electrical activity; magnetoencephalography (MEG), which is a technique for mapping brain activity by the electrical currents in the brain; positron emission tomography (PET), which measures brain activity by the utilization of glucose in the brain; single photon emission computed tomography (SPECT), which measures blood flow in the brain; and evoked potentials, which measure the electrical signals in a brain where a sensory system is stimulated.

Utilizing state of the art technology to demonstrate the client's brain damage is essential for the brain injury trial lawyer. It is imperative to look beyond the conventional x-rays, CT's and MRI's taken of our client's brain.

Written by: Irv Cantor

Cantor Stoneburner Ford Grana & Buckner

7130 Glen Forest Drive

Suite 400

Richmond VA 23226

Toll Free: 1-800-648-1488

virginiatrialfirm.com

icantor@virginiatrialfirm.com