



Our neuroradiologists are specially trained in the diagnostic imaging of conditions such as trauma, stroke, tumors, degenerative disorders, vascular malformations, and aneurysms.

Inland Imaging physicians and staff are dedicated to providing the highest quality imaging of neurological diseases. In addition, our fellowship-trained radiologists utilize image-guided interventions to treat disease or injury.

Inland Imaging works closely with clinical specialists including neurologists, neurosurgeons, spine surgeons, and head and neck surgeons.

ABOUT INLAND IMAGING

Fast, accurate answers to questions about your health are important. When facing a serious illness or condition, the proper treatment at the right time can make all the difference. At Inland Imaging, our specialty trained radiologists, nurses, and technologists make sure that accurate and detailed answers are delivered quickly so your physician can best guide your treatment. When it comes to your health, better answers can lead to better outcomes.

SCHEDULING

509.363.7880 Fax: 509.363.7886

INLAND IMAGING LOCATIONS

With imaging centers throughout the Northwest, and an advanced integrated electronic network, there's less hassle for you and your physician. For a list of our Inland Imaging locations and maps, please refer to: www.inlandimaging.com/locations.


Inland Imaging[®]
www.inlandimaging.com



VOLUMETRIC MRI

A new tool in the
early diagnosis of Alzheimer's


Inland Imaging[®]

ABOUT VOLUMETRIC MRI

Clinical studies have shown that a fully automated procedure called Volumetric MRI — which measures the memory centers of the brain and compares them to expected size — is effective in predicting the progression from mild cognitive impairment to dementia or Alzheimer’s disease.

The Volumetric MRI is used to measure brain atrophy, and can help physicians predict decline in people with mild cognitive impairment (MCI). MCI is considered a transitional stage between the forgetfulness associated with normal aging and Alzheimer’s disease. Yet, many patients with MCI do not progress to Alzheimer’s, and these individuals don’t need treatments targeted to prevent or slow down neuro-degeneration.

The Volumetric MRI is an objective measurement used to distinguish MCI patients who will clinically decline from those who will remain stable.

The goal of volumetric MRI is to find a neuro-imaging measure of change that reflects more than merely a person’s advancing age, but instead, correlates tightly with how a person’s cognitive status worsens over time. Studies have shown that these early changes, especially the shrinking of the hippocampus, may offer a robust biological marker for change.

Volumetric MRI is a non-invasive procedure for early diagnosis of the disease and provides information that could help patients receive optimal care and allow families more time for planning, based upon the progression of the disease.



ABOUT MRI

MRI (magnetic resonance imaging) uses a combination of radio waves and a magnetic field to obtain remarkably detailed images of the brain. MRI images of the brain are clearer and more detailed than other imaging methods, enabling the detection of abnormalities that might be obscured by bone on a CT or x-ray.

Dementia

Dementia is a progressive brain dysfunction that results in limitations of daily activities and increases with advancing age. Dementia isn’t a specific disease. Instead, dementia describes a group of symptoms affecting intellectual and social abilities severely enough to interfere with daily functioning. Many causes of dementia symptoms exist. Alzheimer’s disease is the most common cause of a progressive dementia.

Alzheimer’s

More than 5 million Americans have been diagnosed with Alzheimer’s, a disease that affects brain function. Alzheimer’s patients commonly suffer from dementia and require long term care to help aid with impaired memory and orientation dysfunctions such as concentration, proper judgment, personality changes, and impaired motor skills.

Though there is not a cure for Alzheimer’s, treatment for symptoms combined with the professional support can make a patient live a more comfortable and productive life. Being able to better predict which individuals with MCI are at greatest risk for developing Alzheimer’s can provide critical information as disease-modifying therapies become available.

Volumetric MRI is part of the Alzheimer’s Disease Neuroimaging Initiative (ADNI), the largest Alzheimer’s disease study ever funded by the National Institutes of Health.

Neuroradiologists

Inland Imaging offers a wide variety of neurological imaging services to better diagnose abnormalities, exclude the presence of disease, and evaluate injury of the brain.

MORPHOMETRY RESULTS			
Brain Structure	Volume (cc)	% of ICV (95% Normative Percentile)	Normative Percentile
Hippocamp	5.33	0.38 (0.41-0.57)	1
Lateral Ventricles	49.63	3.53 (1.32-4.39)	83
Inferior Lateral Ventricles	5.24	0.37 (0.13-0.31)	> 99

Brain images from an Inland Imaging Volumetric MRI report.