

# DIAGNOSTIC IMAGING CENTER

GSVS's diagnostic imaging capabilities at our on site IMAGING CENTER provide the needed link between physical medicine and the "technology" of magnetic resonance imaging (MRI) and computerized tomography (CT) scanning for state-of-the-art diagnostics in a referral practice setting. These capabilities afford comprehensive radiographic examination techniques, ultrasonography (abdominal and thoracic), fluoroscopy, and CT/MRI scanning. These modalities allow non-invasive evaluation for a variety of disorders including cancer, neurologic abnormalities and many others. As always GSVS's own staff of boarded specialists is available to provide immediate consultations at the time of diagnostic testing. GSVS also offers review of x-rays and other imaging results taken by the practitioner. These can be sent to the GSVS staff either by mail or teleradiography.

## MRI

Magnetic Resonance Imaging (MRI) utilizes a magnetic field to differentiate between areas of fluid and soft tissue. An MRI is especially valuable in evaluating the brain, spinal cord, and intervertebral discs, as well as joint cartilage, tendons and ligaments.

### *MRI Specifications:*

- **General Electric 0.5 Tesla magnet**
- **High field, closed unit**
- **Premier software package with digital imaging**
- **Veterinary dedicated machine**
- **Operated by certified MRI technologists**

### *Diagnostic Uses:*

- **Seizures**
- **Tumors of the Brain**
- **Thromboembolism**
- **Trauma**
- **Ocular and Orbital Diseases**
- **Head and Nasal Neoplasia**
- **Upper Motor vs. Lower Motor Neuron Diseases**
- **Lumbosacral Disease**
- **Neoplasia of Soft Tissue**



## CT SCANNER

Computerized tomography is a non-invasive, radiography technique which allows us to fully evaluate the patient in a two dimensional modality. Once the patient is in the CT scanner a series of x-rays are taken and the information is transferred to a computer resulting in a highly detailed composite of bone and soft tissue.

### *Diagnostic Uses:*

- **Evaluation of Complex Orthopedic Diseases**
- **Identification of Disease**
- **Evaluation of Metastatic Diseases**
- **Head Trauma**
- **CT Guided Biopsies**
- **Radiation Treatment Planning**



## RADIOLOGY

GSVS has two separate radiology suites which contain individual 500 MA x-ray machines and processing units. Fluoroscopy is also available which allows us to perform organ function studies of the trachea and esophagus. It also allows more controlled and safe needle placement in myelography.



## ULTRASOUND

Ultrasound of the chest and abdomen is performed in a separate imaging suite specifically designed for this diagnostic modality. Our ImproMed ultrasound unit has color flow capabilities for special cardiac evaluations. Diagnostic ultrasound is a safe, non-invasive, accurate therapeutic modality used to assess organ structure and cardiac fixation.

