

Modern Neurosurgery

by Dr. med. Basilios Zountsas

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Modern Neurosurgery

- Neurosurgery (medical specialty) <90 years history
concerns the diagnosis & treatment of diseases of brain (& skull), spine (& spinal cord) and peripheral nerves
- Modern (refinement of the classic art) <20 years history
Newer concepts, newer techniques and technologies

To win the battle



Modern Neurosurgery



Modern Neurosurgery Dr.Zountsas

- 2001-2005 Evangelisches KH Bethel Bielefeld Germany

1400 Operations

- 2006-2014 St.Lukes Hospital Panorama Saloniki Greece

2300 Operations

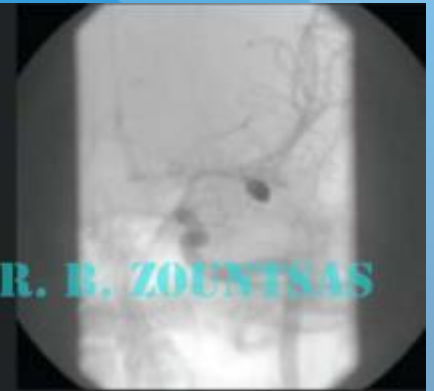
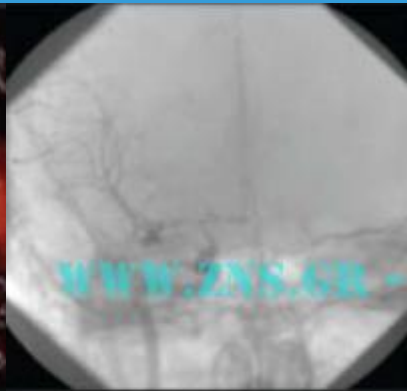
32% Brain - 63% Spine - 5% Peripheral Nerves

5% Children

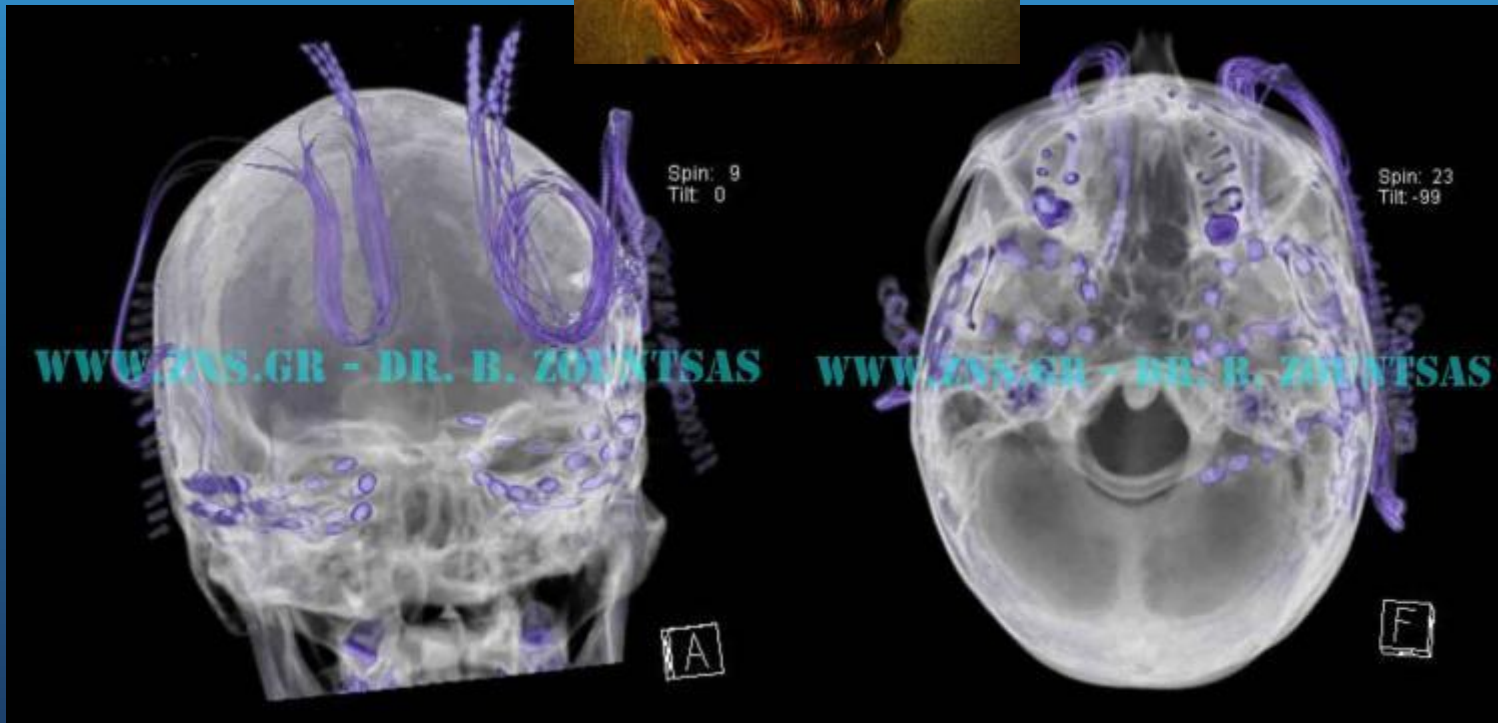
BRAIN SURGERY

- **Tumor Surgery** (Meningioma, Astrocytoma, Ependymoma, GBM, Oligodendroglioma, Pituitary Adenoma, Metastasis, Craniopharyngioma, Clivus Chordoma, Medulloblastoma, Acoustic Neurinoma, Epidermoid, Hemangioblastoma)
- **Vascular surgery** (Aneurysm, AVM, Cavernoma, Stroke, Trigeminal Neuralgia)
- **Epilepsy Surgery** (Hippocampal Sclerosis, FCD, Hypothalamic Amartoma, Hemispherical Syndromes)
- **Brainstem surgery** (Cavernoma, Astrocytoma)
- **Congenital Disease** (Chiari, Dandy Walker, Craniosynostosis, Hydrocephalus)
- **Trauma & Infection** (Hematomas, Rhinorrhea, Brain Abscess)

BRAIN 1 - Aneurysm surgery



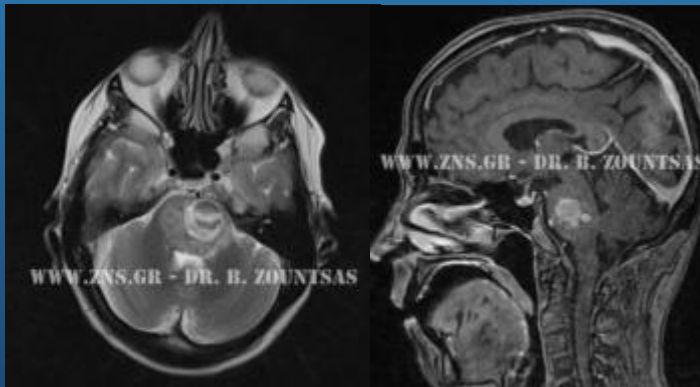
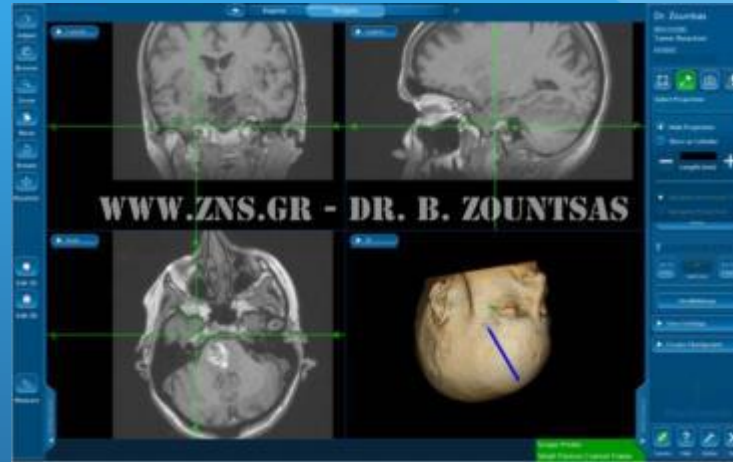
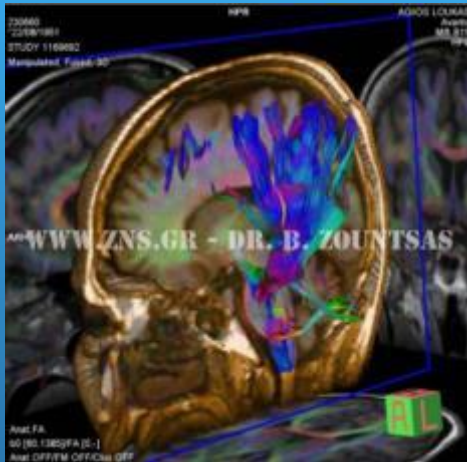
BRAIN 2 - Epilepsy surgery Diagnostic



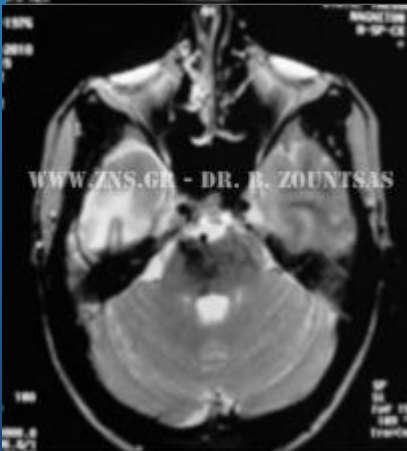
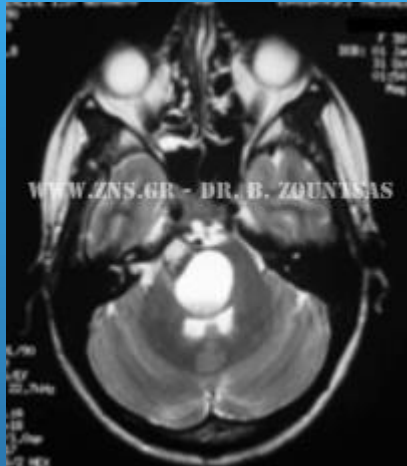
BRAIN 2 - Epilepsy surgery AHE



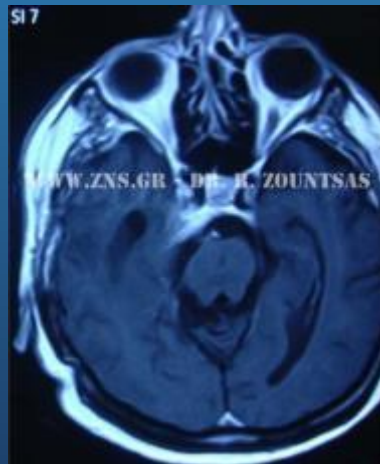
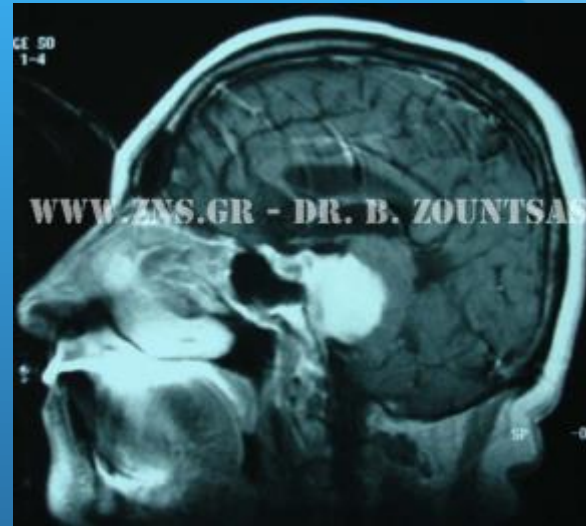
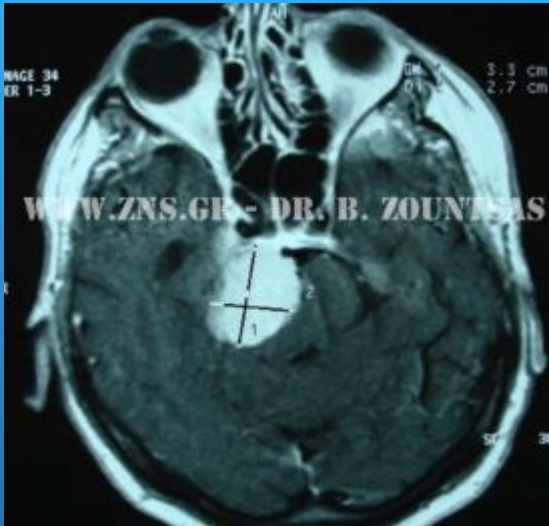
BRAIN 3 - Brainstem



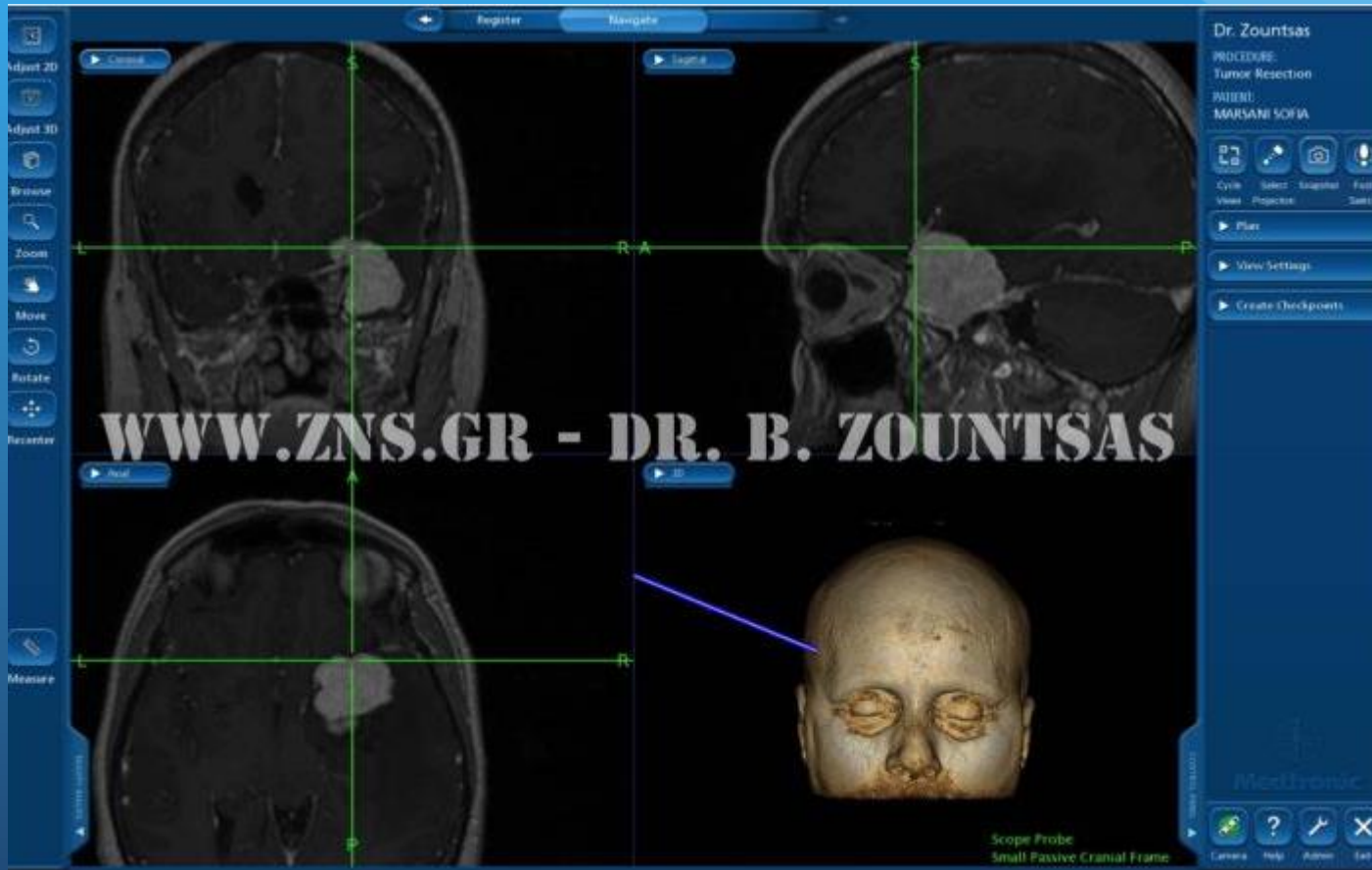
BRAIN 3 - Brainstem



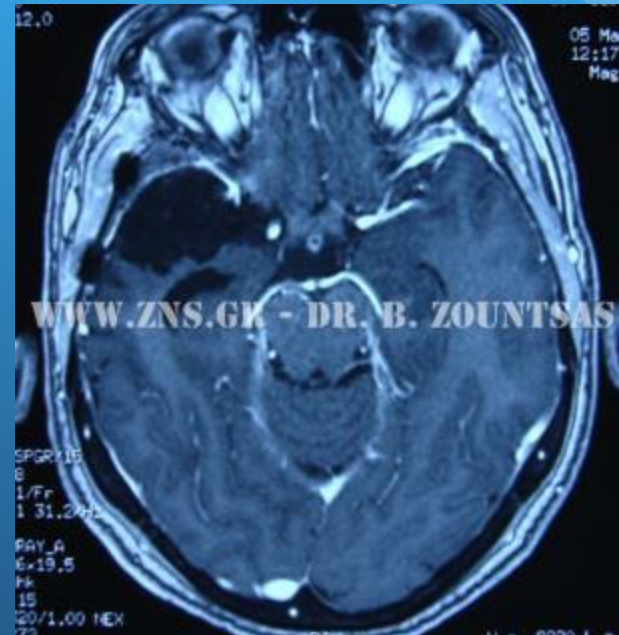
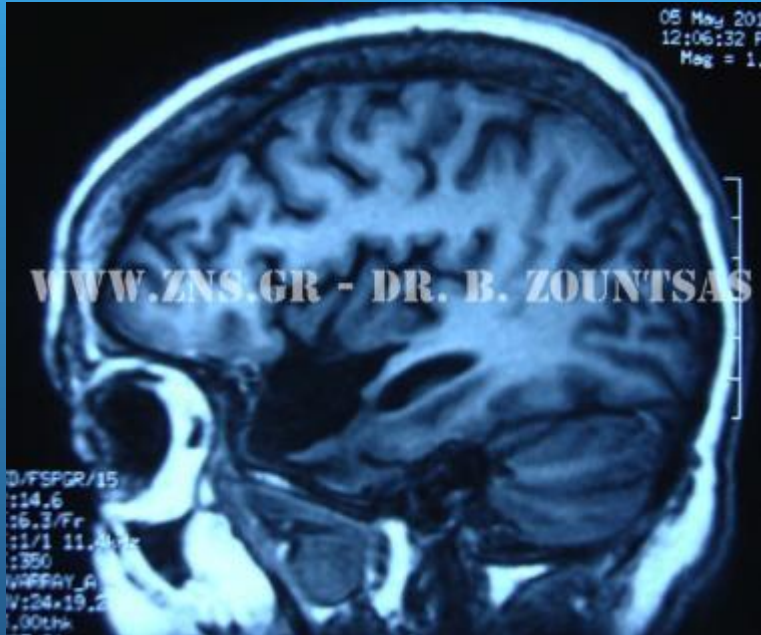
BRAIN 4 - Meningioma Surgery



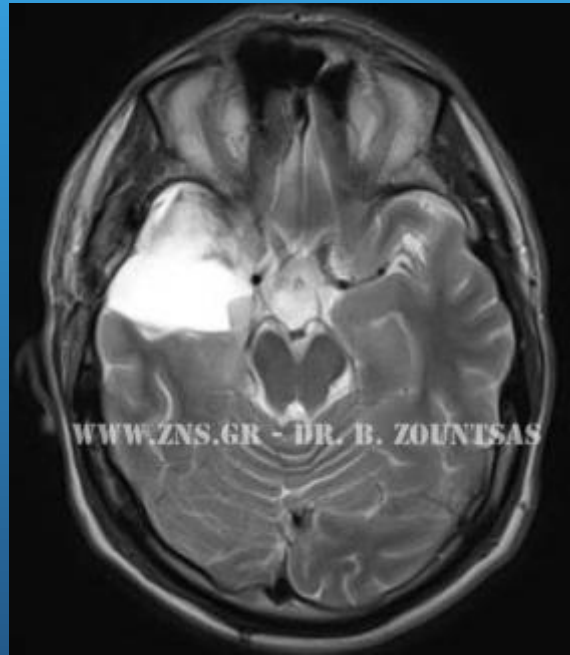
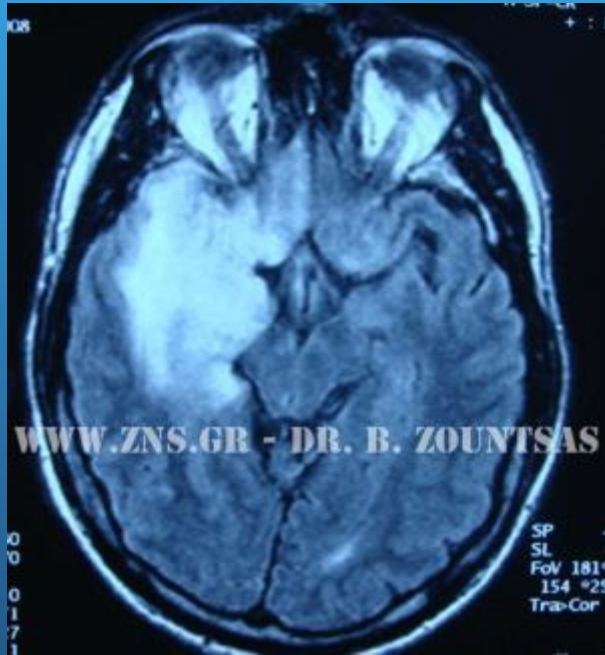
BRAIN 4 - Meningioma Surgery



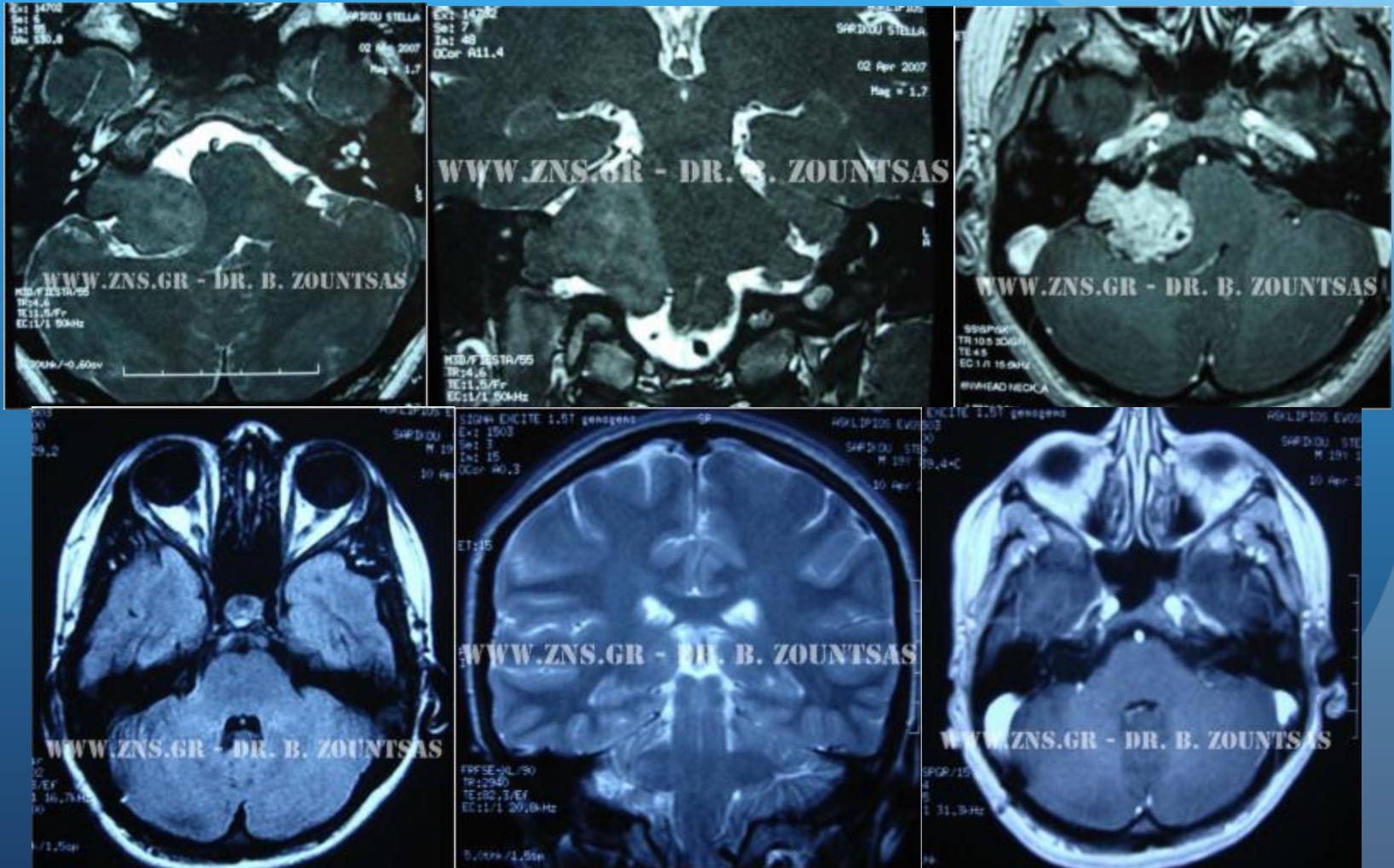
BRAIN 4 - Meningioma Surgery



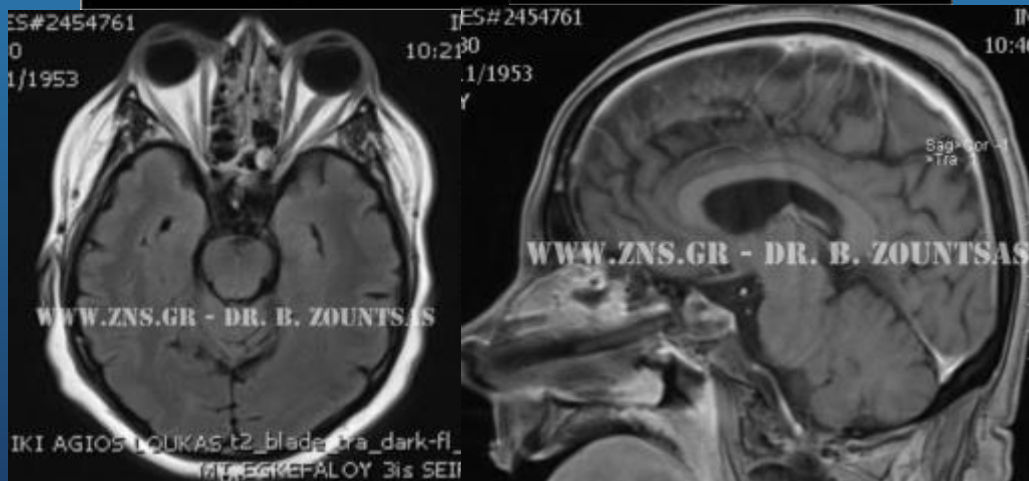
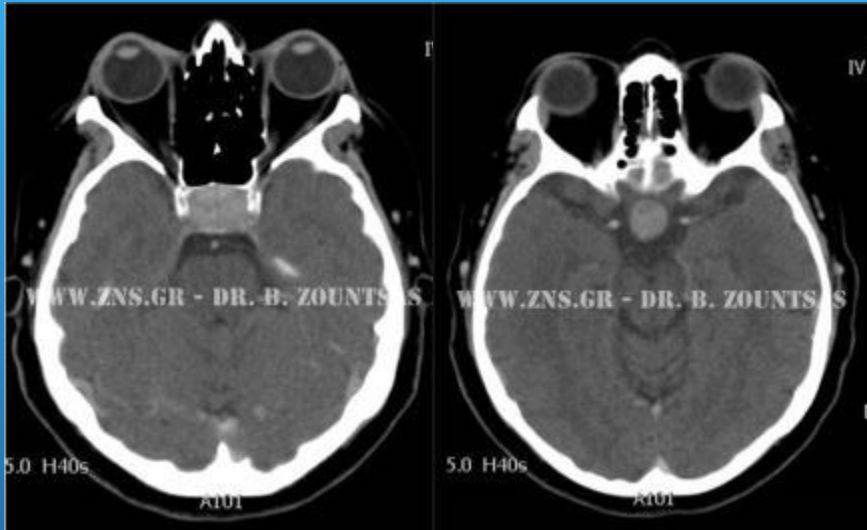
BRAIN 5 - Astrocytoma Surgery



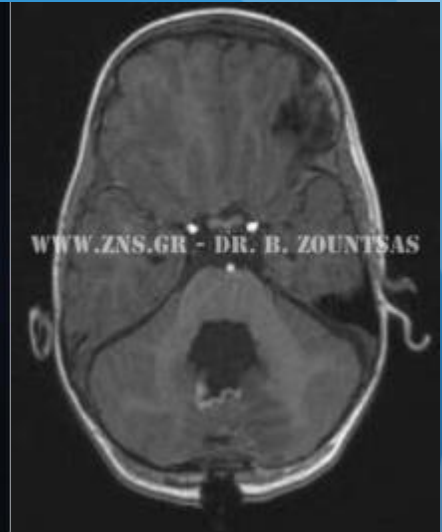
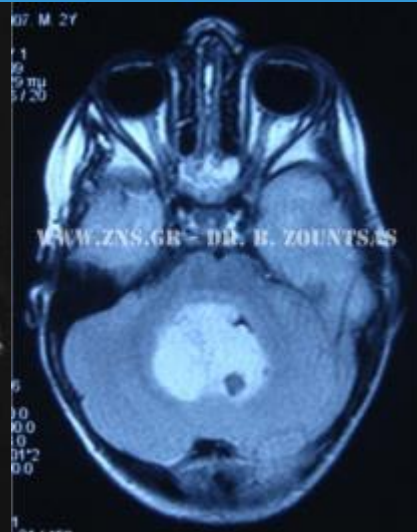
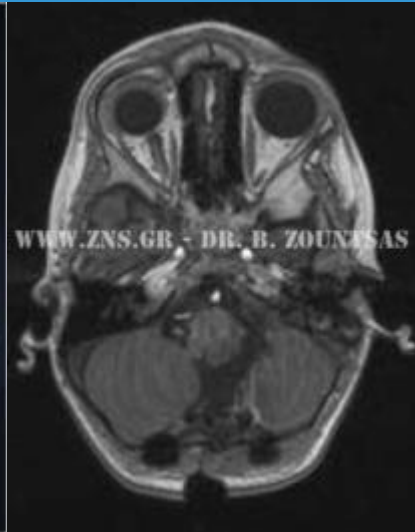
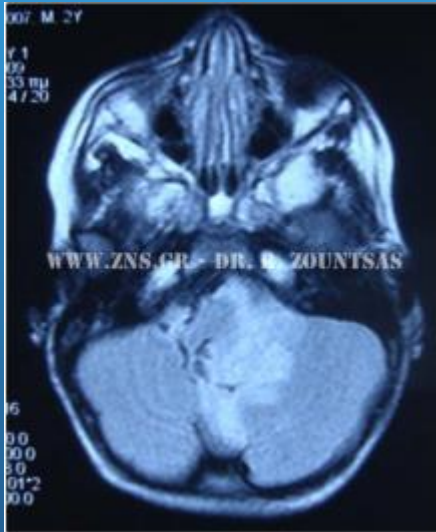
BRAIN 6 - Acoustic Neuroma Surgery



BRAIN 7- Pituitary Surgery



BRAIN 8 - Posterior Fossa Children



BRAIN 9 - IntraVentricular Tumor



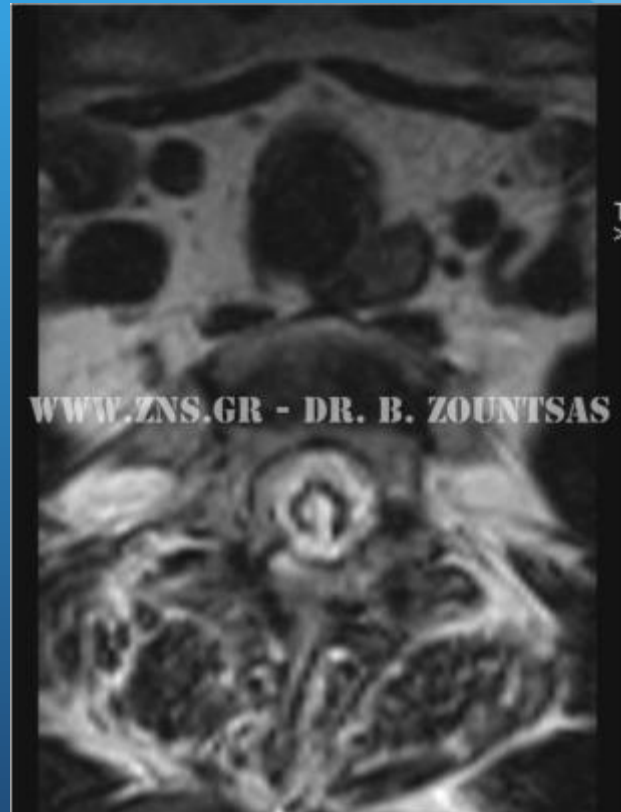
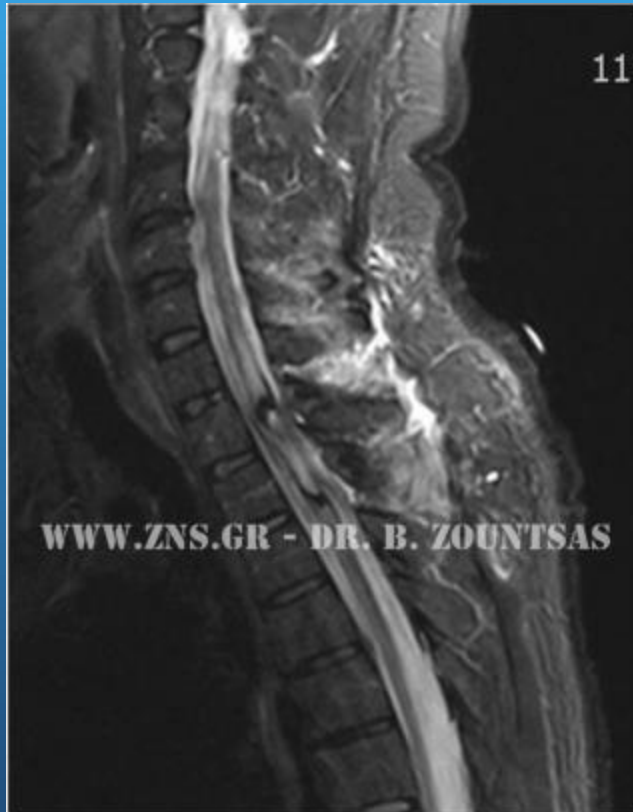
BRAIN 9 - IntraVentricular Tumor



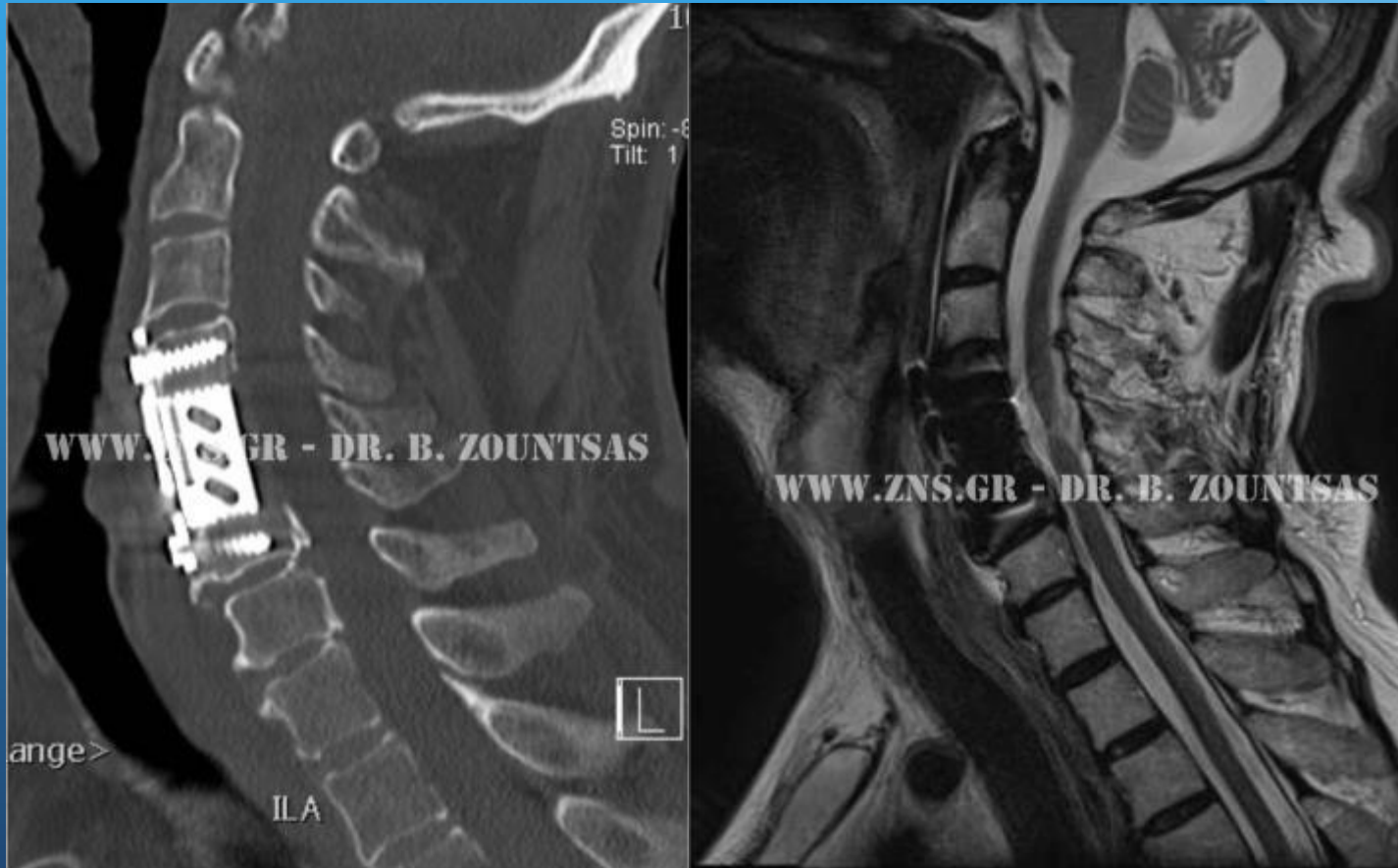
SPINE SURGERY

- Degenerative disease (Disk Herniation, Spinal Stenosis, Spondylolisthesis, Spine Instability)
- Trauma (Fractures Cervical, Thoracic & Lumbar)
- Tumor (Vertebral, intraspinal epidural, intradural, intramedullary ependymomas, astrocytomas)
- Syringomyelia

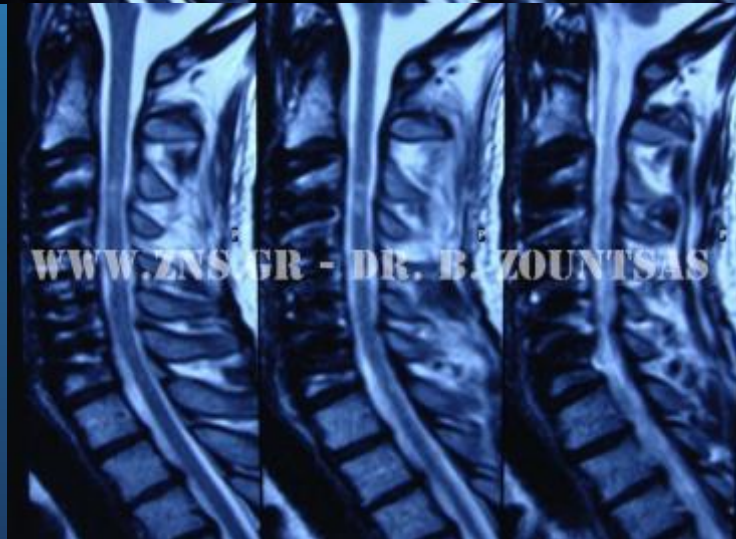
SPINE 1 - Intramedullary Tumors



SPINE 2 - Extramedullary Tumors



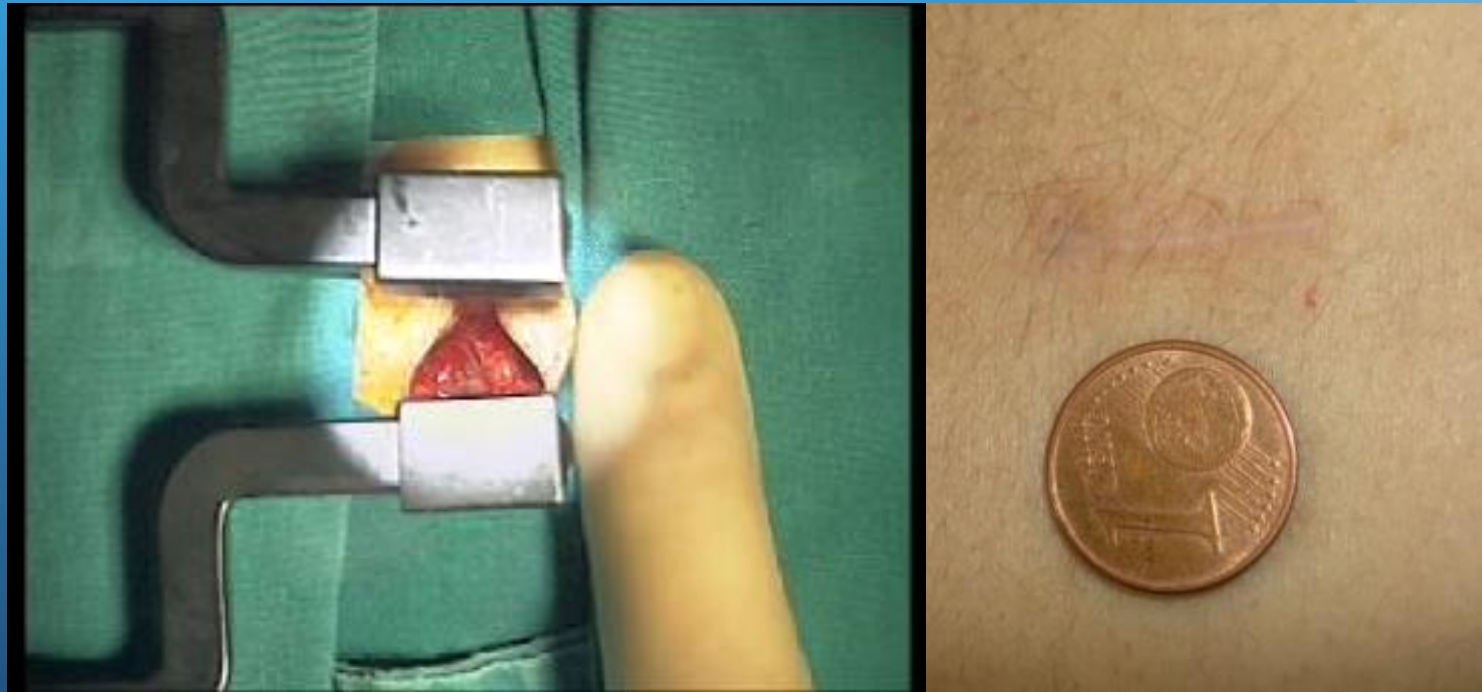
SPINE 3 - Cervical ACDF



SPINE 4 Cervical Fractures



SPINE 5 - Lumbar Microdiscectomy



SPINE 6 - Kyphoplasty



Spine 7 - Percutaneous Fixation









SPINE 8 - Complex Thoracic



PERIPHERAL NERVES SURGERY

- Brachial Plexus Surgery (Trauma, Tumor)
- Compression syndromes (SUS, CTS)
- Trauma
- Spasticity & Pain (ITB)

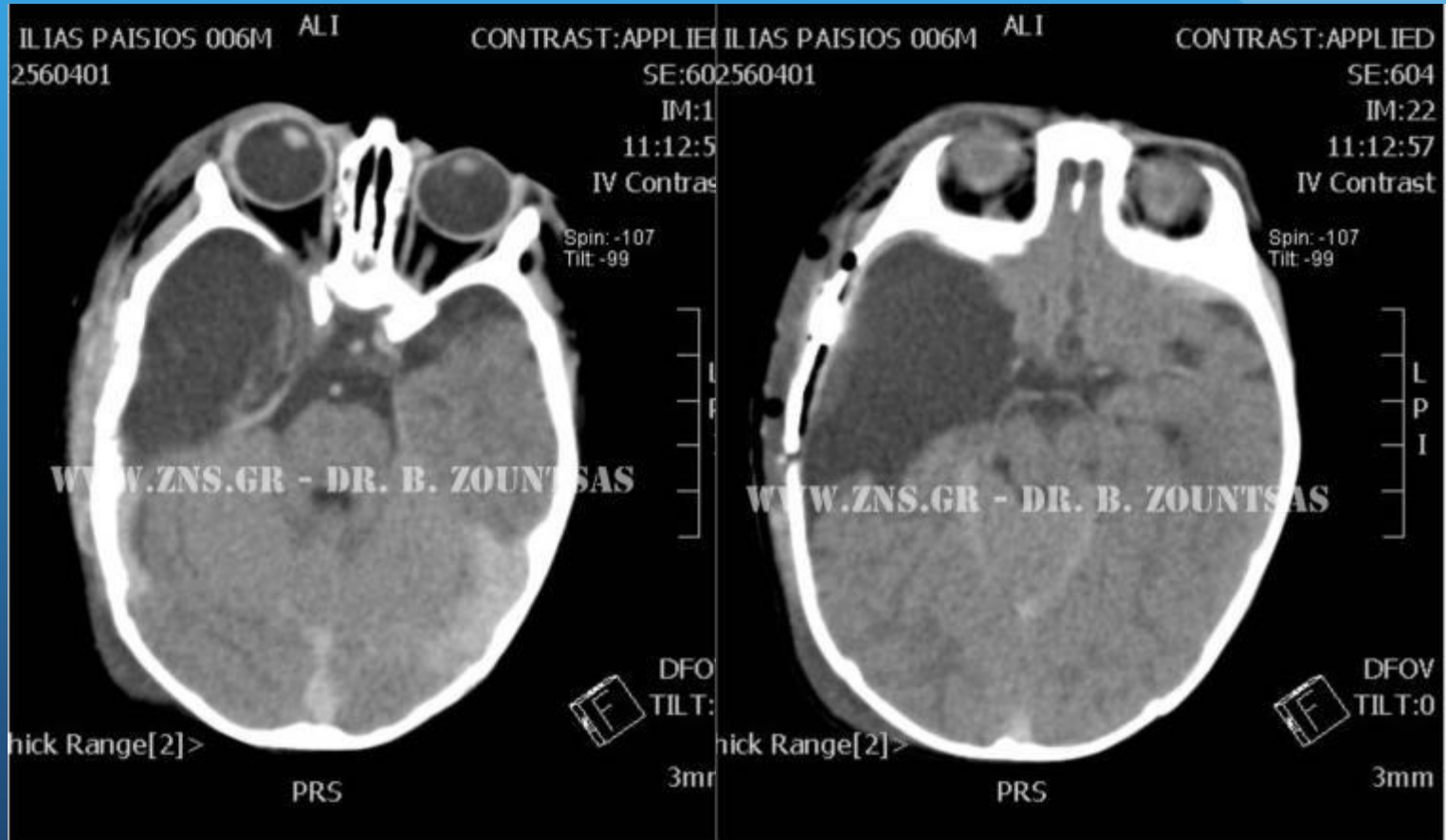
ITB for Spasticity



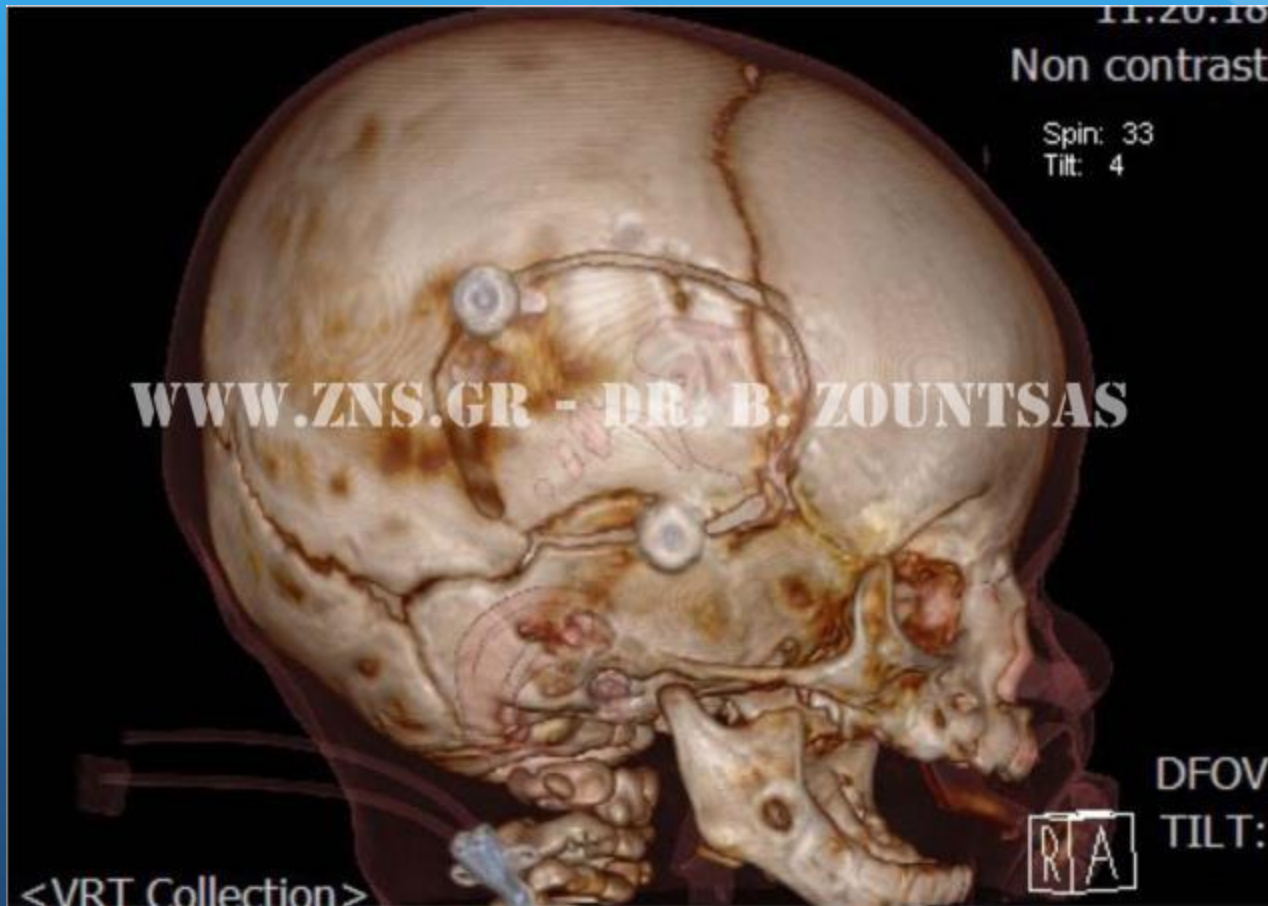
BRAIN 6 months old Infant



BRAIN 6 months old Infant



BRAIN 6 months old Infant





Thank You