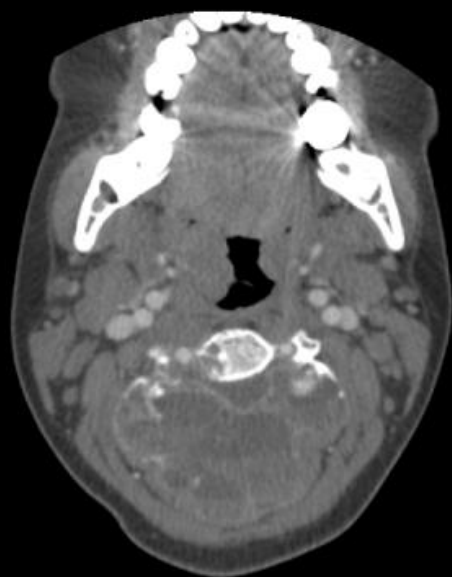




Neck Pain

Donald Schultz







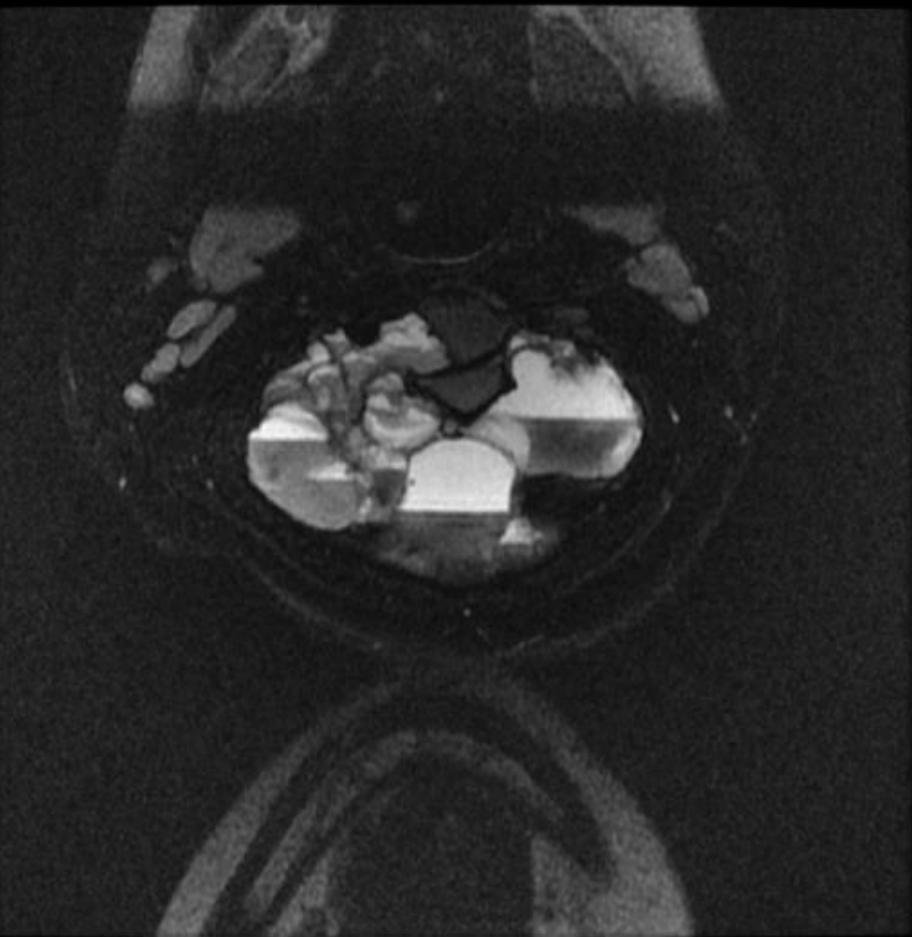


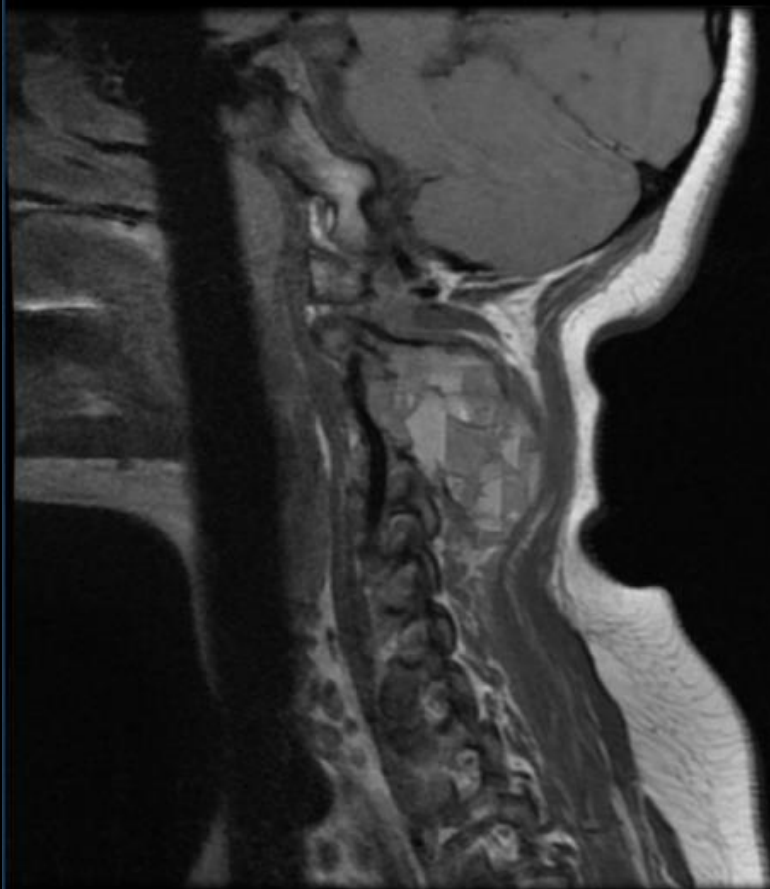
I 1

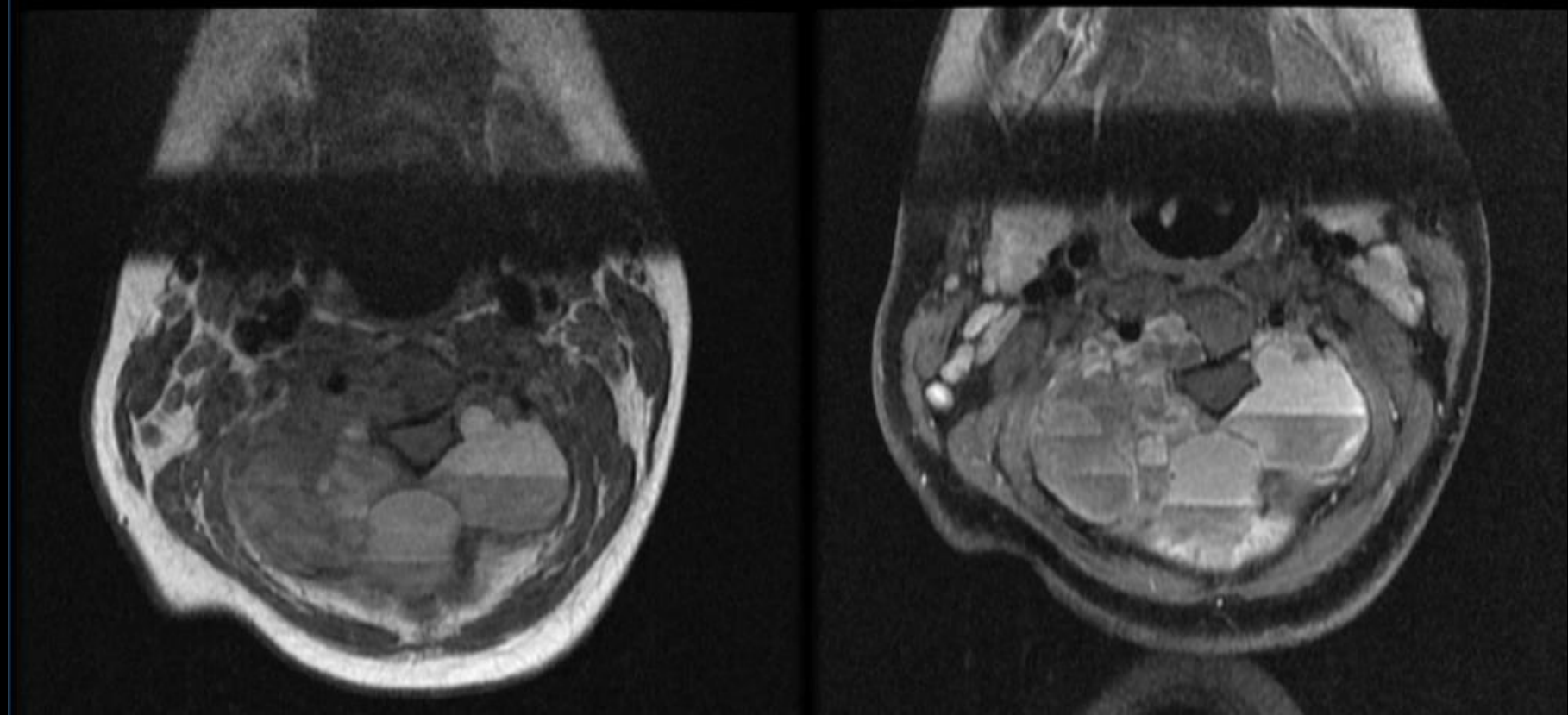
HE+ 20.5mm/rot
1.5:1/0.5sp

PM
= 41

I 193







1. BONE, BIOPSY (POSTERIOR SPINE) :

- BENIGN FIBROOSSEOUS LESION WITH HEMORRHAGE.
- NO EVIDENCE OF MALIGNANCY.





Aneurysmal Bone Cyst (ABC)

Differential Diagnosis (DDX) Posterior Element Lytic Lesion

- ABC
 - Benign, expansile, peds/young adults
 - Posterior elements, long bones
 - Pedicle->vertebral body (absent pedicle)
 - Epidural
 - Canal stenosis
- Osteoblastoma
 - Benign osteoid
 - Large osteoid osteoma (>1.5 cm)
 - 40% occurrence
 - Posterior->vertebral body

DDX

- Tuberculosis
 - Disc spared
 - Paraspinal abscess
- Metastases
 - Older
 - Multilevel
 - Permeative
- Langerhans
 - Vertebra plana
 - Disc spared

Fluid Fluid Level DDX

- ABC
 - Isolated or in conjunction with other etiologies
- Telangiectatic Osteosarcoma
 - Incomplete margination, cortical breakthrough/soft tissue mass, solid regions
- Giant Cell Tumor
 - Extends to subchondral bone

DDX

- Simple Bone Cyst
 - Less complex
- Osteoblastoma
 - Solid tumor associated with ABC
- Chondromyxoid Fibroma
 - Eccentric expanded metaphyseal lesion
 - Less common

Aneurysmal Bone Cyst



ABC

- Blood filled spaces separated by connective tissue septa
 - Multinucleated giant cells and osteoid
- Aneurysmal or expansile
- Rare over age 30, (80% in <20 yrs)
- Can have soft tissue extension
 - Simulate malignancy or pseudotumor
 - Pelvis/hip

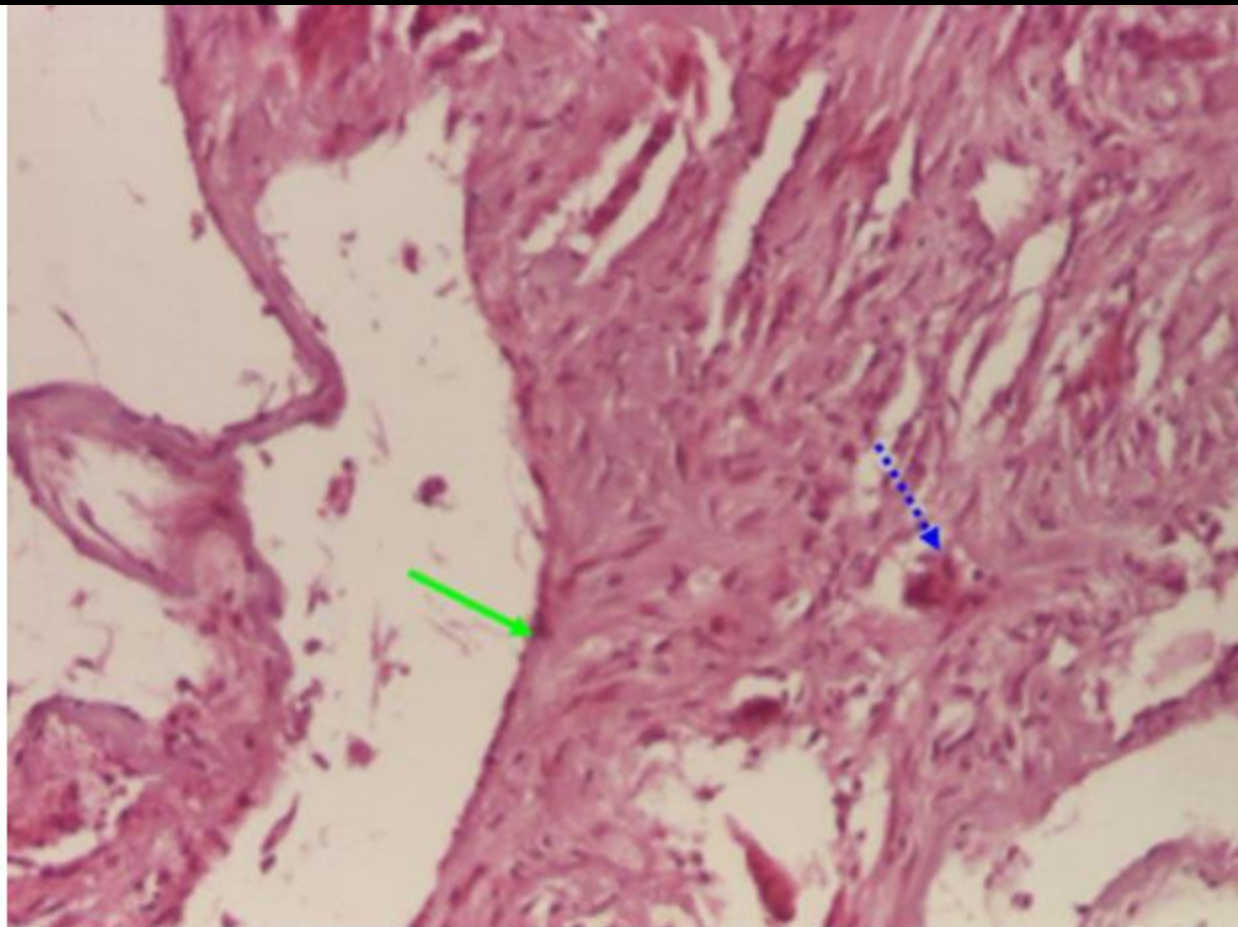


Fig. 13: A higher magnification showed the flat endothelial cells (green arrow) delineating the vascular spaces which are separated by thin or thick fibrous septa containing variable amounts of fibrous tissue, numerous capillaries, and multinucleated giant cells (blue arrow), which tend to be rather small and contain fewer nuclei than those of giant -cell tumor of bone. (HE x10)

References: Dept. of Radiology, University of Medicine and Pharmacy "Gr. T. Popa" Iasi, University Hospital "N.Oblu" Iasi - Iasi/RO

Theory

- Pathogenesis
 - Altered vascular flow leads to local circulatory failure
 - Hemorrhagic “blowout” in a preexisting lesion

ABC

- Fluid fluid
 - Uncoagulated blood
 - Increased T1 signal
 - Methemoglobin

Treatment for ABC

- Curettage and bone graft
 - Variable recurrence
 - 20-50%
- Cryotherapy (Liquid nitrogen)
- Sclerotherapy (Phenol)
- Percutaneous calcitonin
- Preoperative embolization
- Low dose radiation (unresectable)

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