Diagnostic Slide Session 2014
Case 2014-11

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Clinical History

- 64 y/o woman with past medical history of metastatic melanoma
- Progressively worsening headaches primarily in the left portion of her neck, extending into the suboccipital area and the area behind her left ear for several months
Imaging

• MRI of the brain to evaluate for metastatic disease showed a 0.7x0.3 cm circular, enhancing mass on the left side at the C1-C2 area along the intradural course of the vertebral artery

• 5 wks later the mass was 1 x 1 cm

• An angiogram was negative for vascular malformation
Imaging

T1 post first

T1 post 5 wks later
Surgery and Gross Appearance

• A gross total resection of a left intradural, extramedullary vascular-appearing mass at the craniovertebral junction at the level of C1

• Received was a previously bisected 1 x 1 x 0.6 cm, well-circumscribed, shiny, firm mass with a fleshy, red, rubbery cut surface
Immunostains

SMA
Immunostains

Desmin

Muscle Actin
Reticulin
Pathologic Diagnosis:

Large vessels with thick wall with myxoid change, surrounded by abundant endothelial lined spaces with oval stromal cells

IHC and special stains:
- SMA: diffuse positivity, prom. perivascular pattern plus outlining smaller vascular channels
- CD34 & CD31: densely packed small vascular channels
- Muscle actin: patchy perivascular staining
- Desmin: focal positivity
- EMA, pancytokeratin, S-100 and inhibin: negative
- Reticulin: basal lamina around almost all tumor cells
Pathologic Diagnosis:

• MYOPERICYTOMA
• Rare benign tumor, most commonly arising in the subcutaneous tissues, but have been reported within the intracranial cavity
• Adults, M 60%
• Infantile variety also
• ?EBV assoc in AIDS (2 case reports)
References


• Mentzel T, Bridge JA. Myopericytoma, including myofibroma. WHO Classification of Soft Tissue and Bone tumors, 4th ed. 2013
