



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



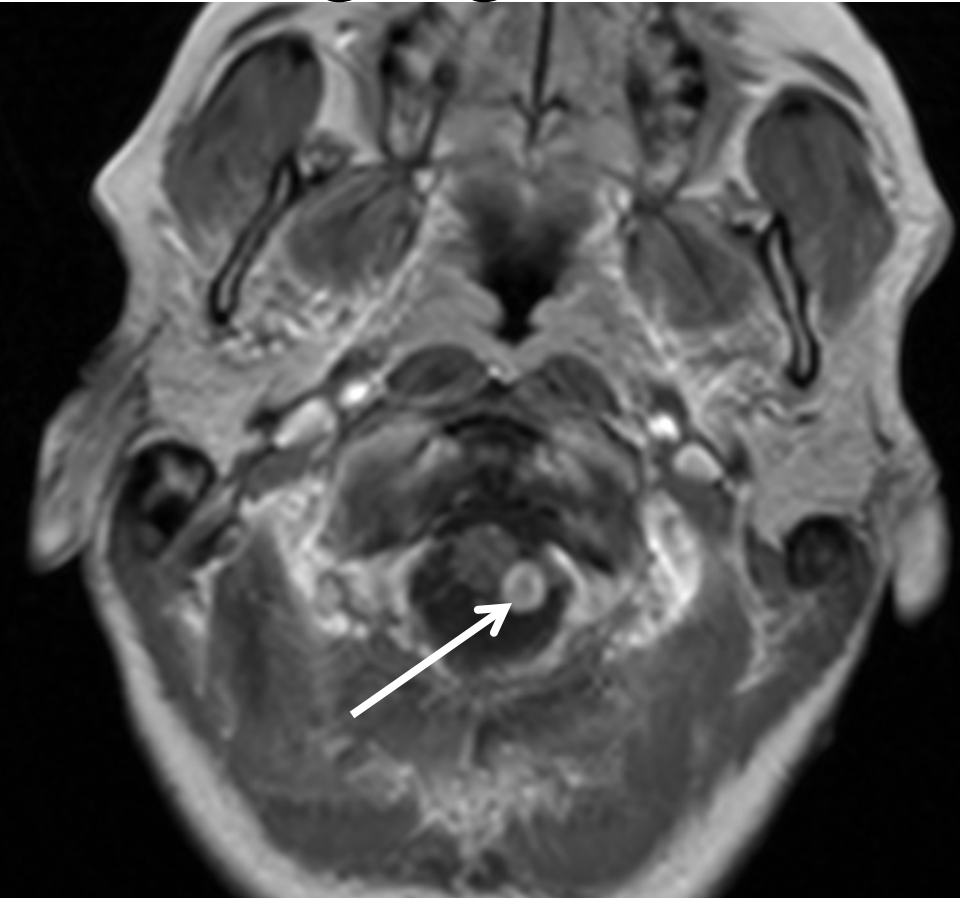


Imaging

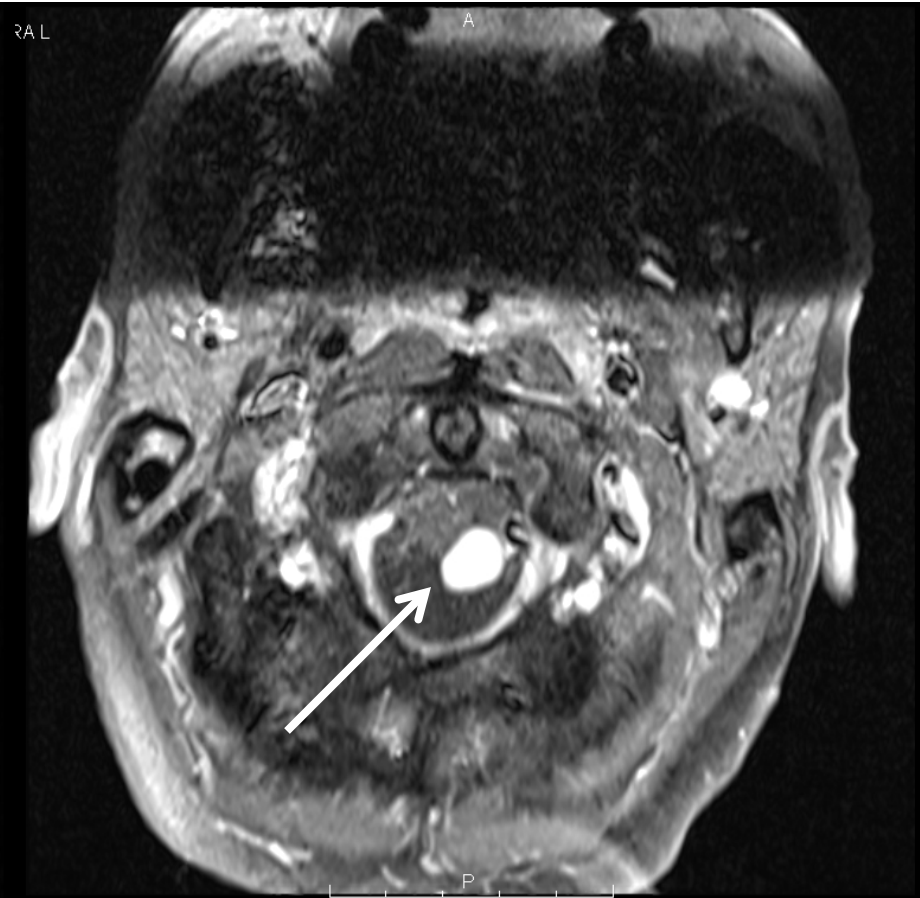
- MRI of the brain to evaluate for metastatic disease showed a 0.7x0.3 cm circular, enhancing mass on the left side at the C1-C2 area along the intradural course of the vertebral artery
- 5 wks later the mass was 1 x 1 cm
- An angiogram was negative for vascular malformation



Imaging



T1 post first



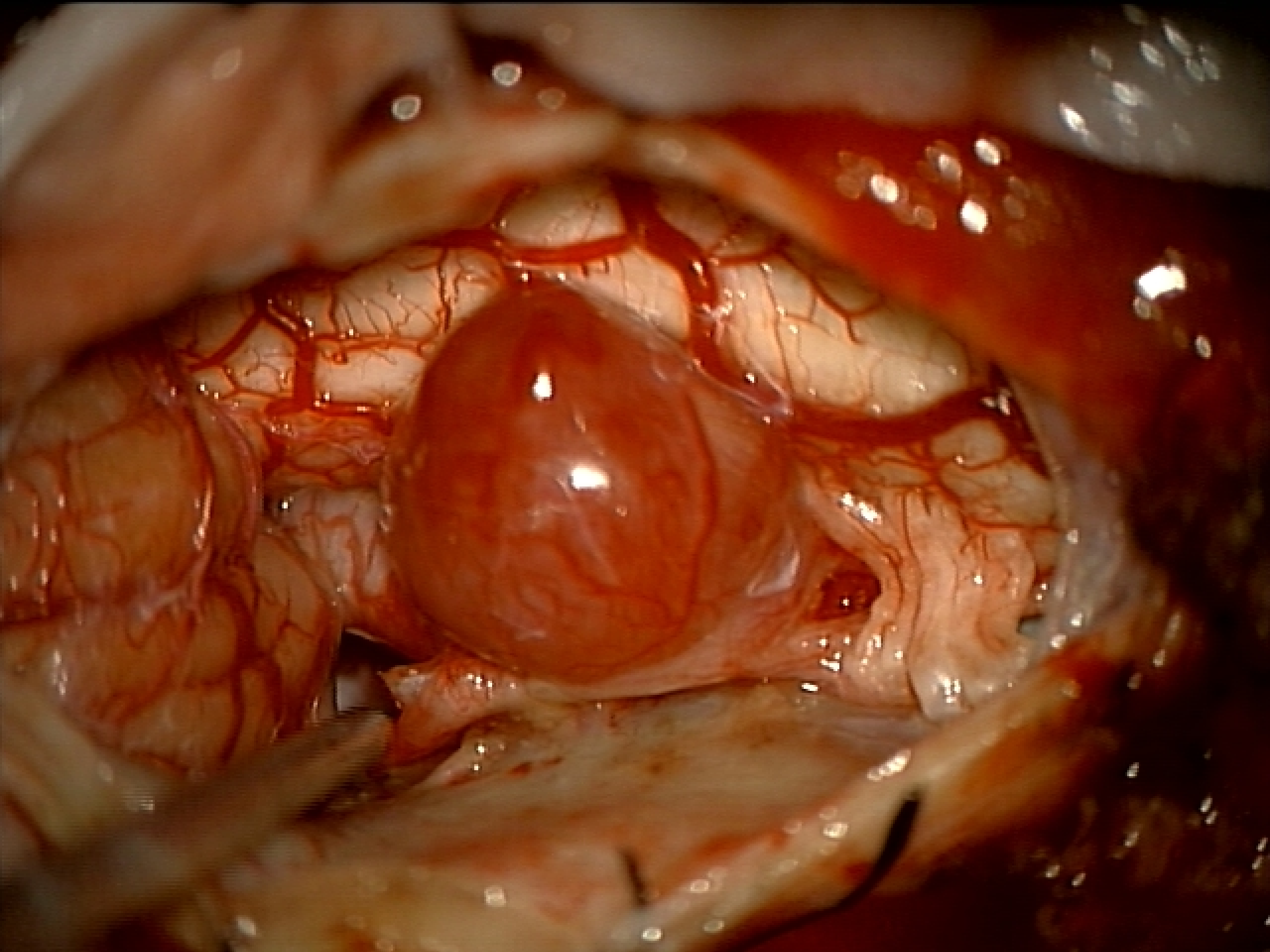
T1 post 5 wks later

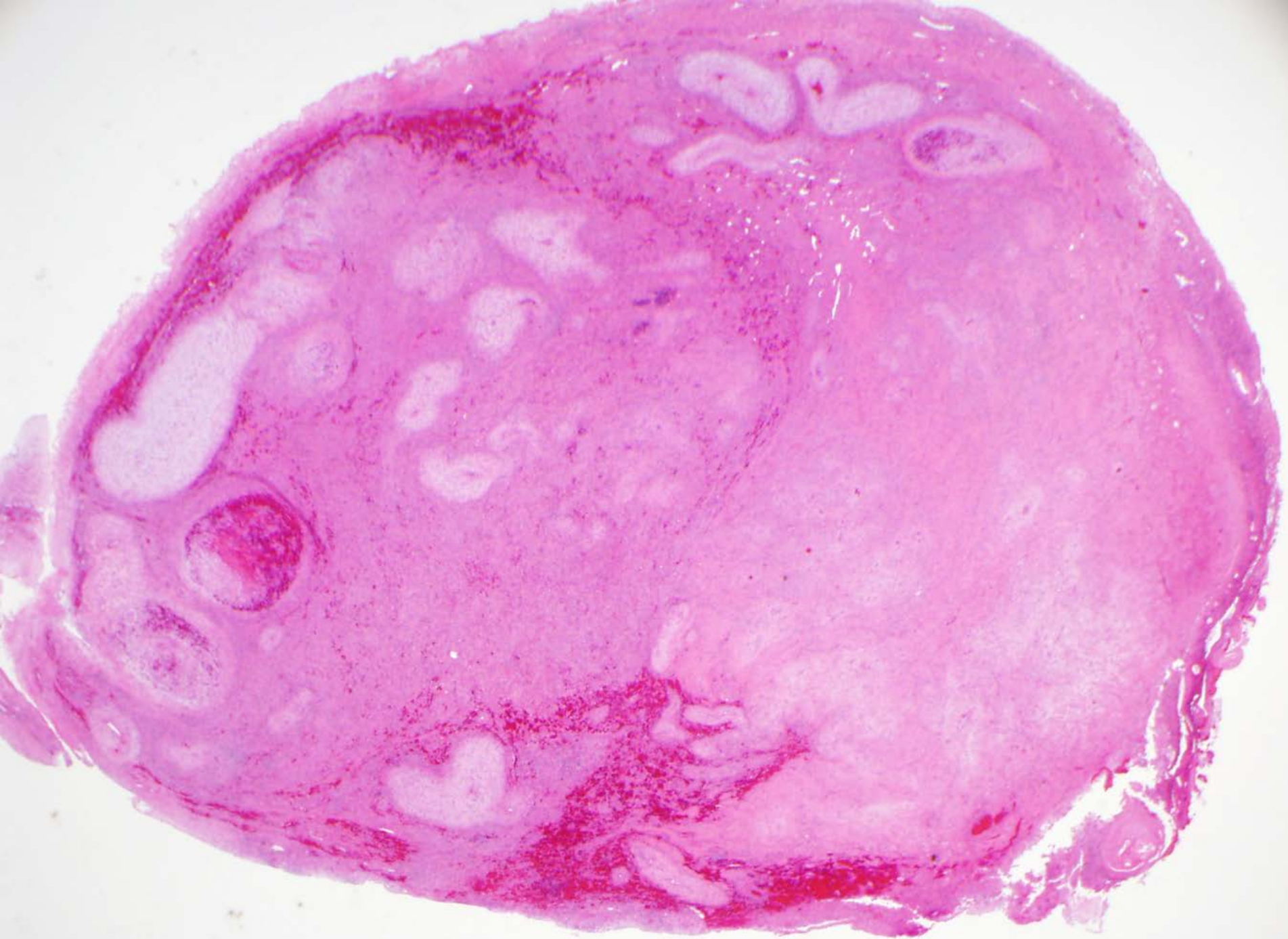


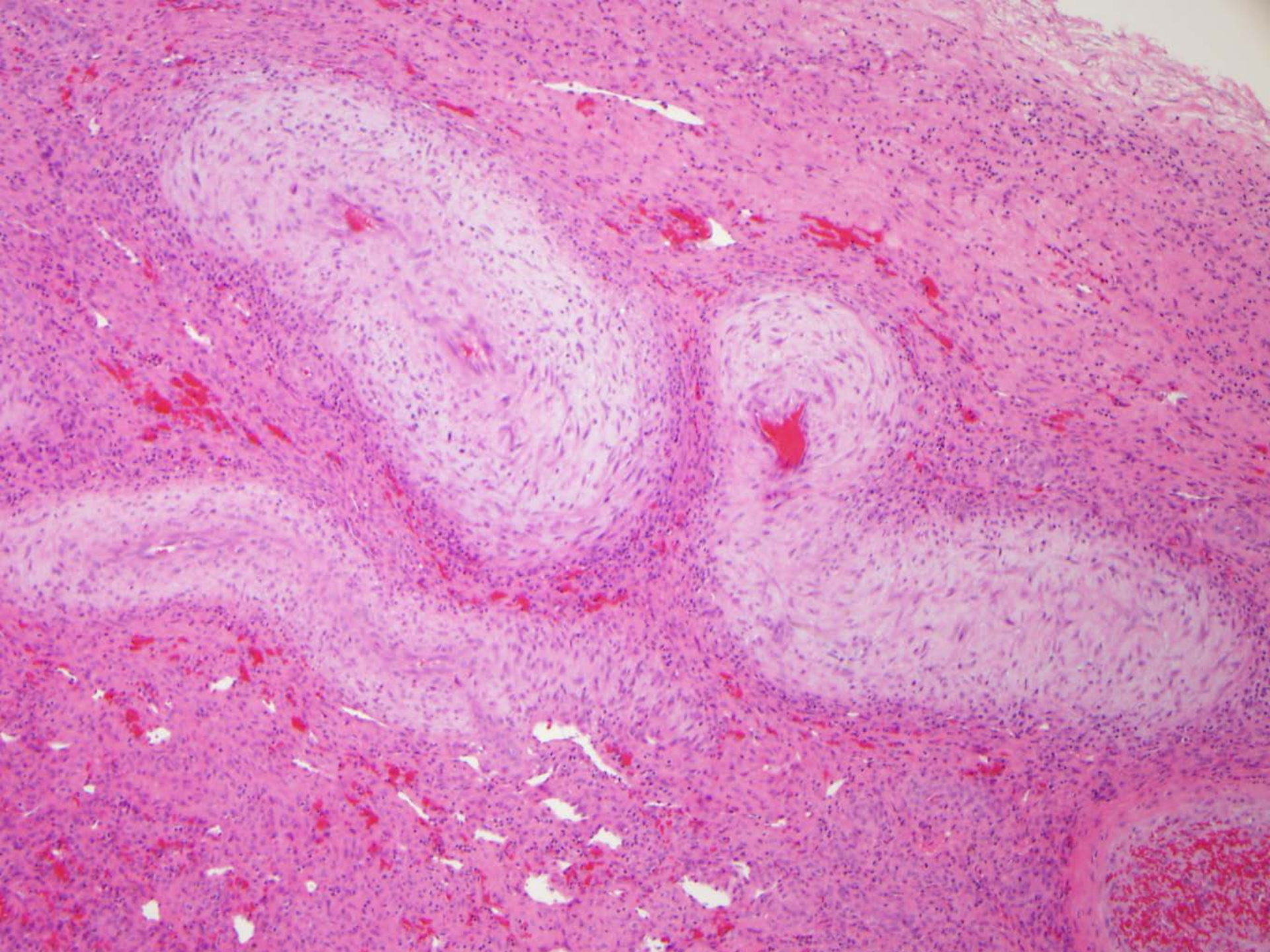
Surgery and Gross Appearance

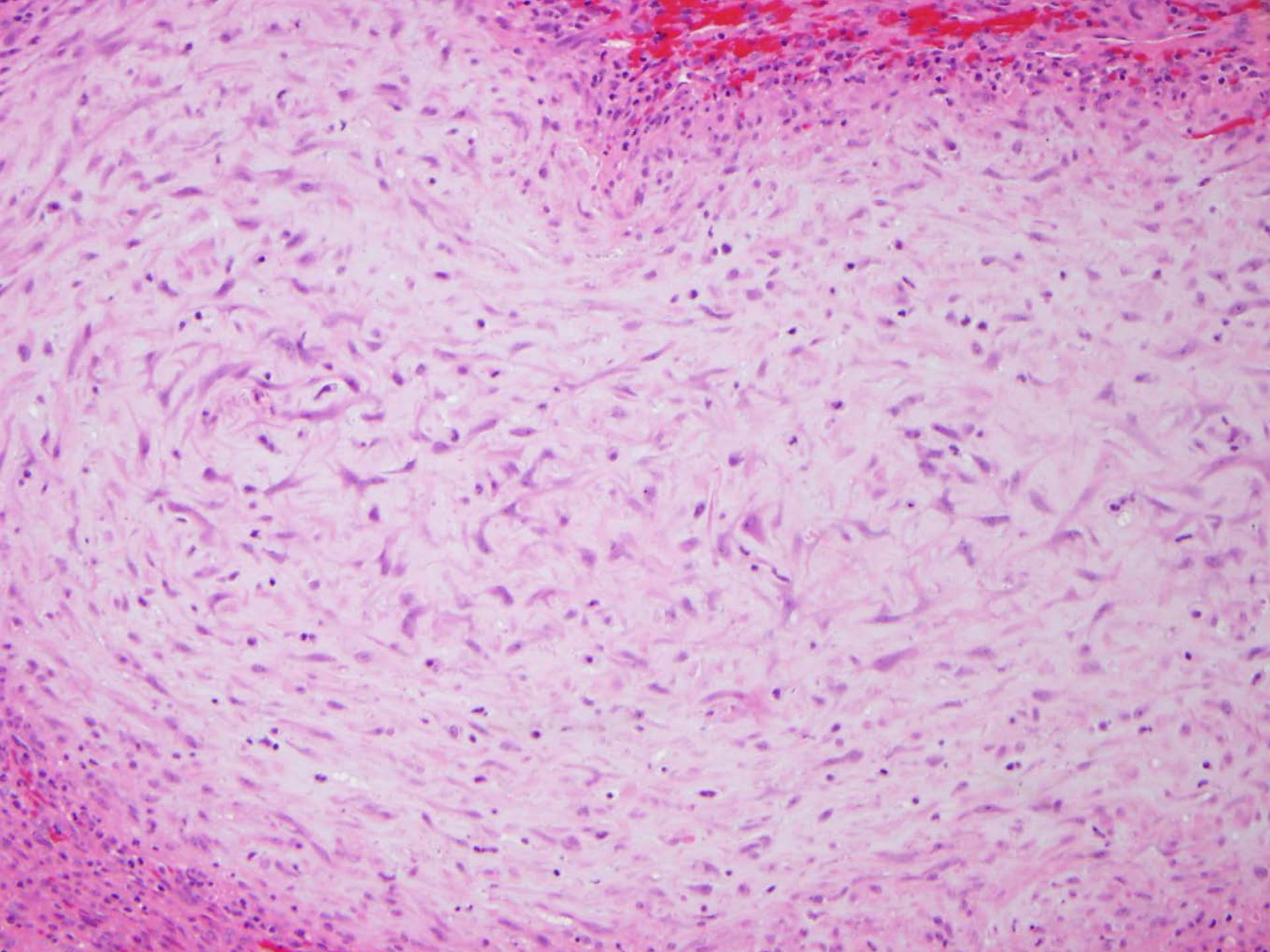
- A gross total resection of a left intradural, extramedullary vascular-appearing mass at the craniovertebral junction at the level of C1
- Received was a previously bisected 1 x 1 x 0.6 cm, well-circumscribed, shiny, firm mass with a fleshy, red, rubbery cut surface

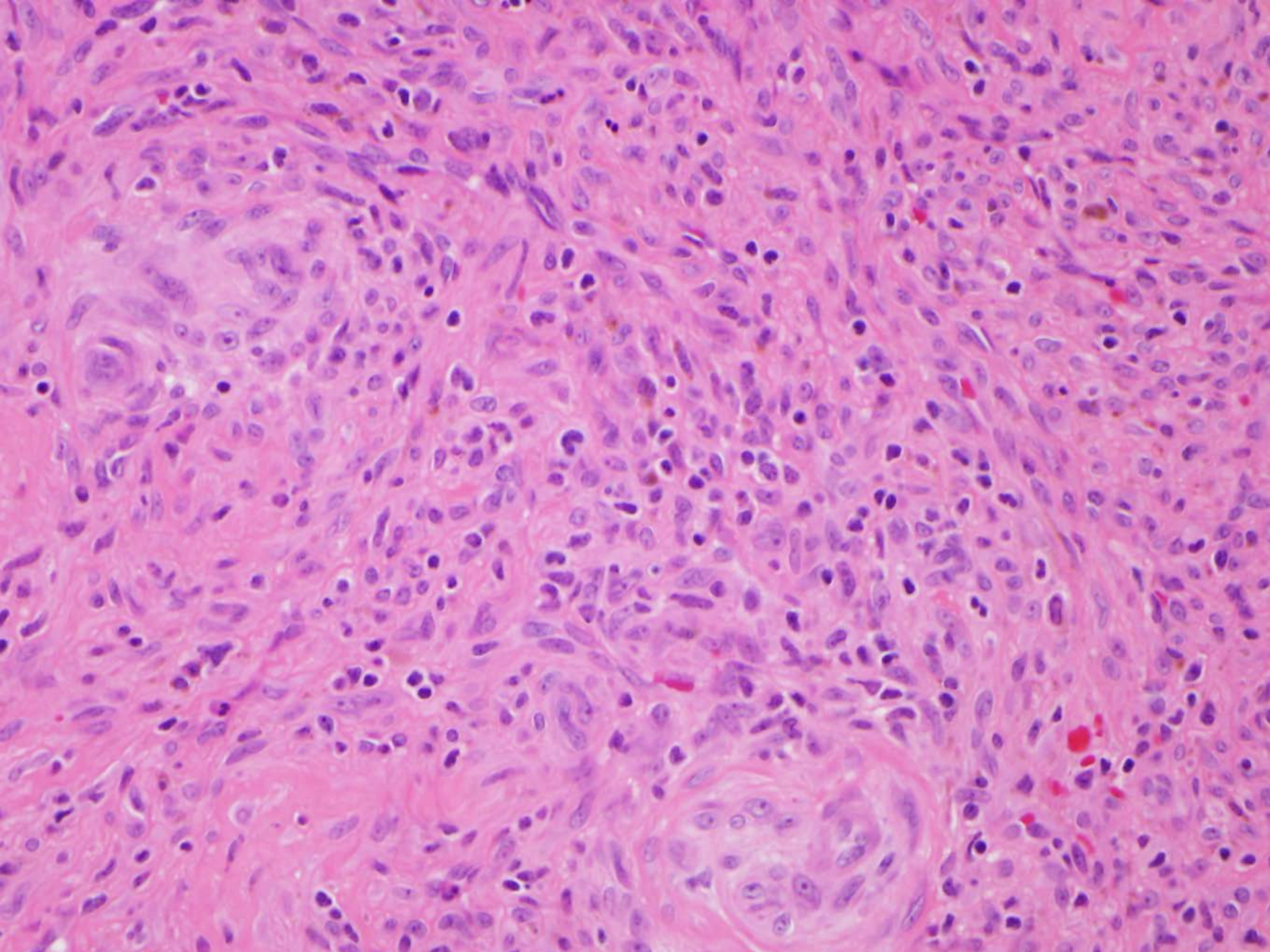


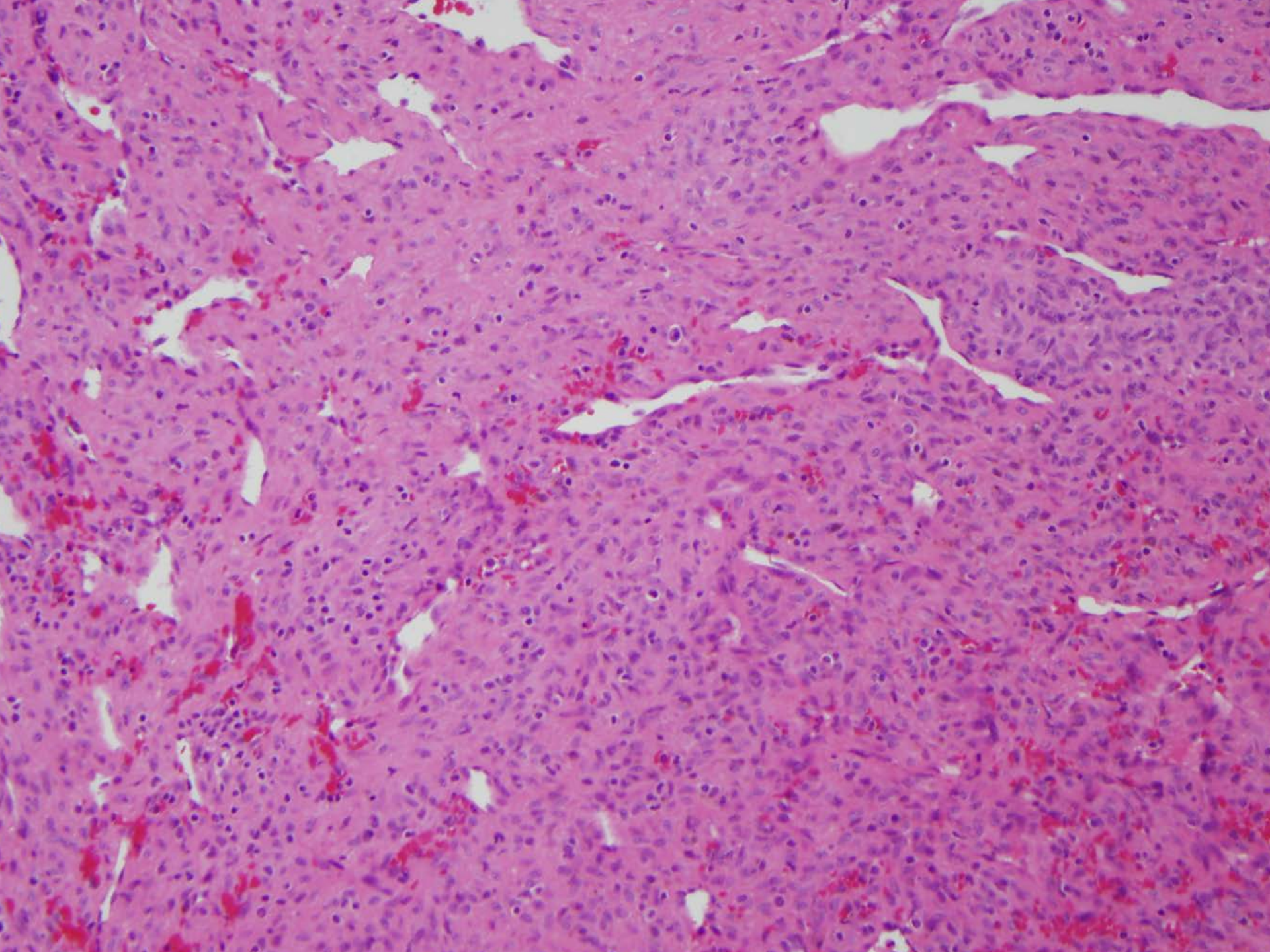














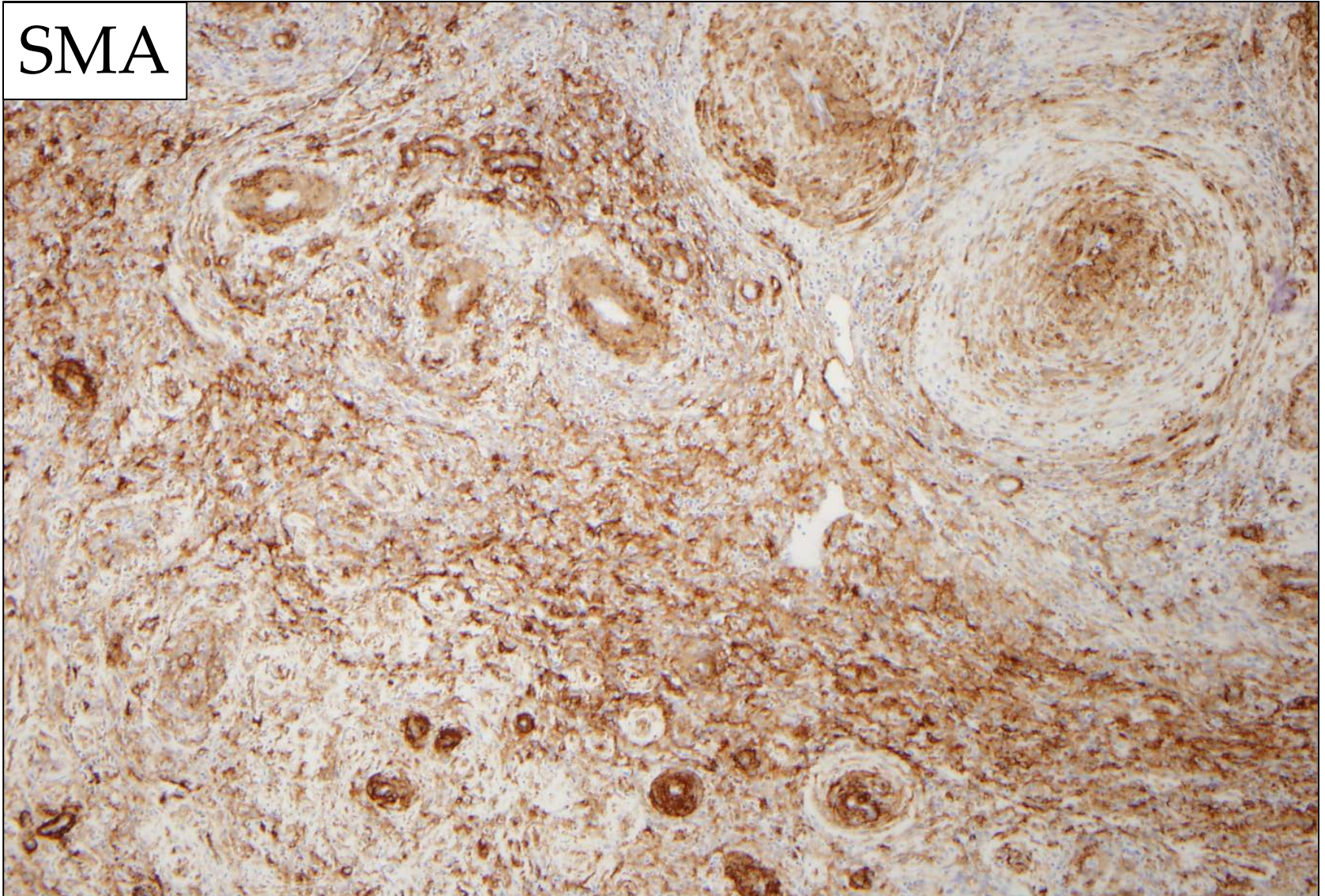
Diagnosis Prognosis



Immunostains



SMA



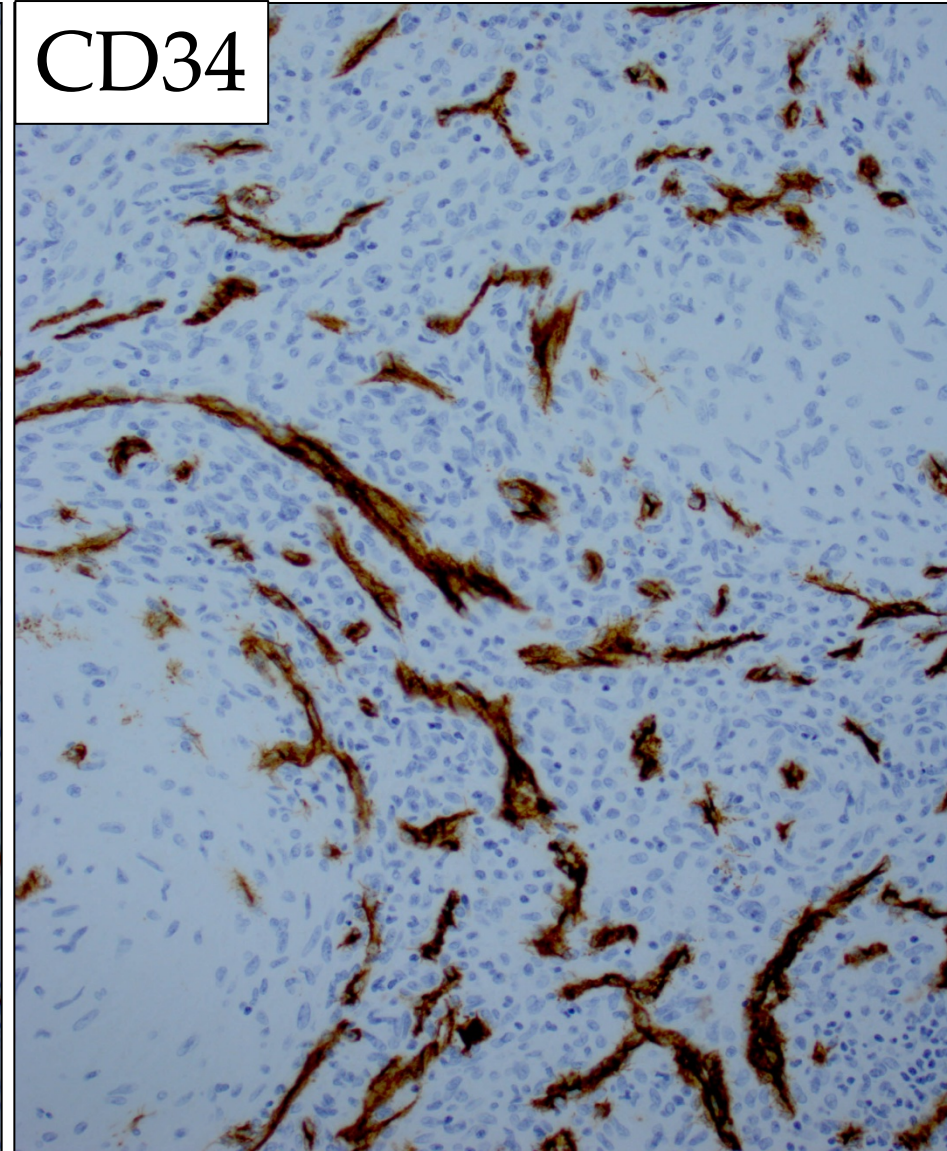
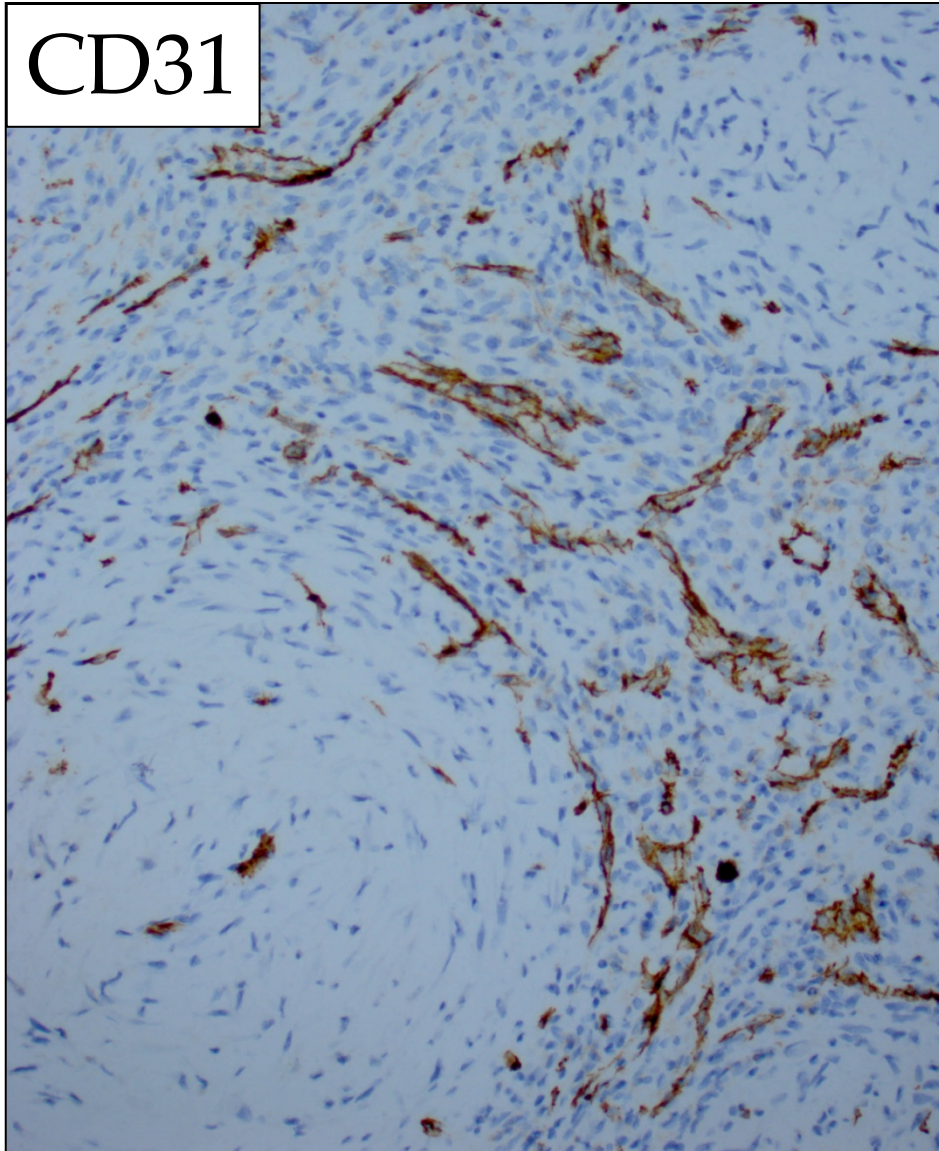


Immunostains



CD31

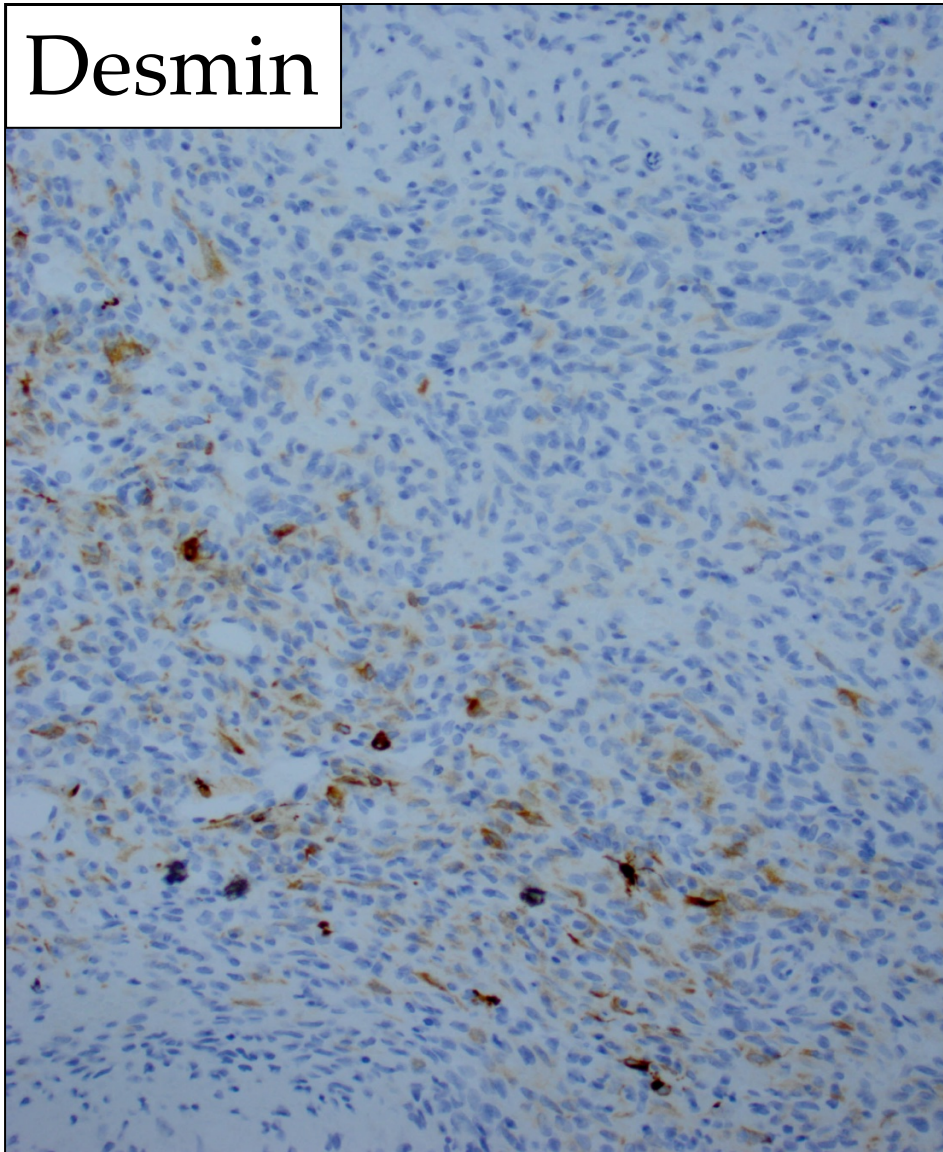
CD34



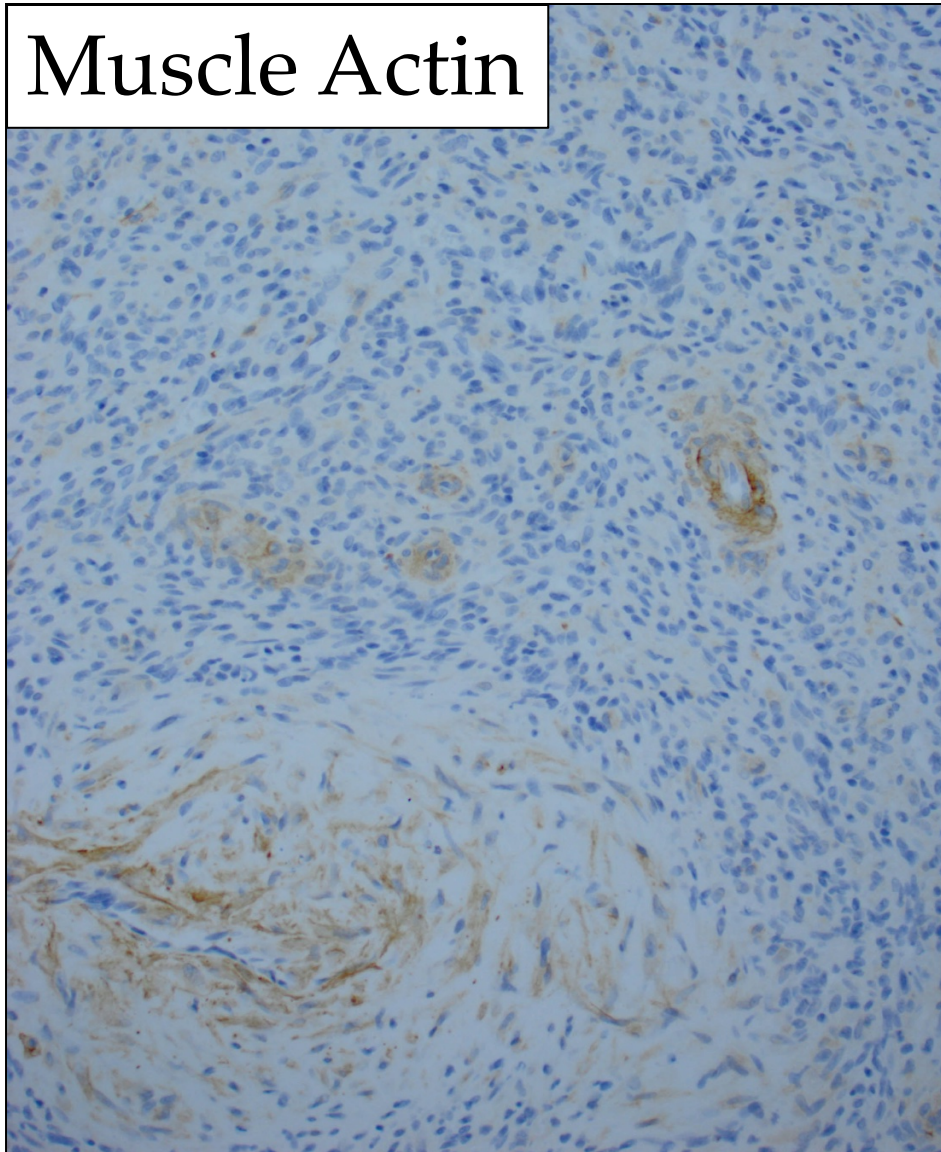
Immunostains



Desmin

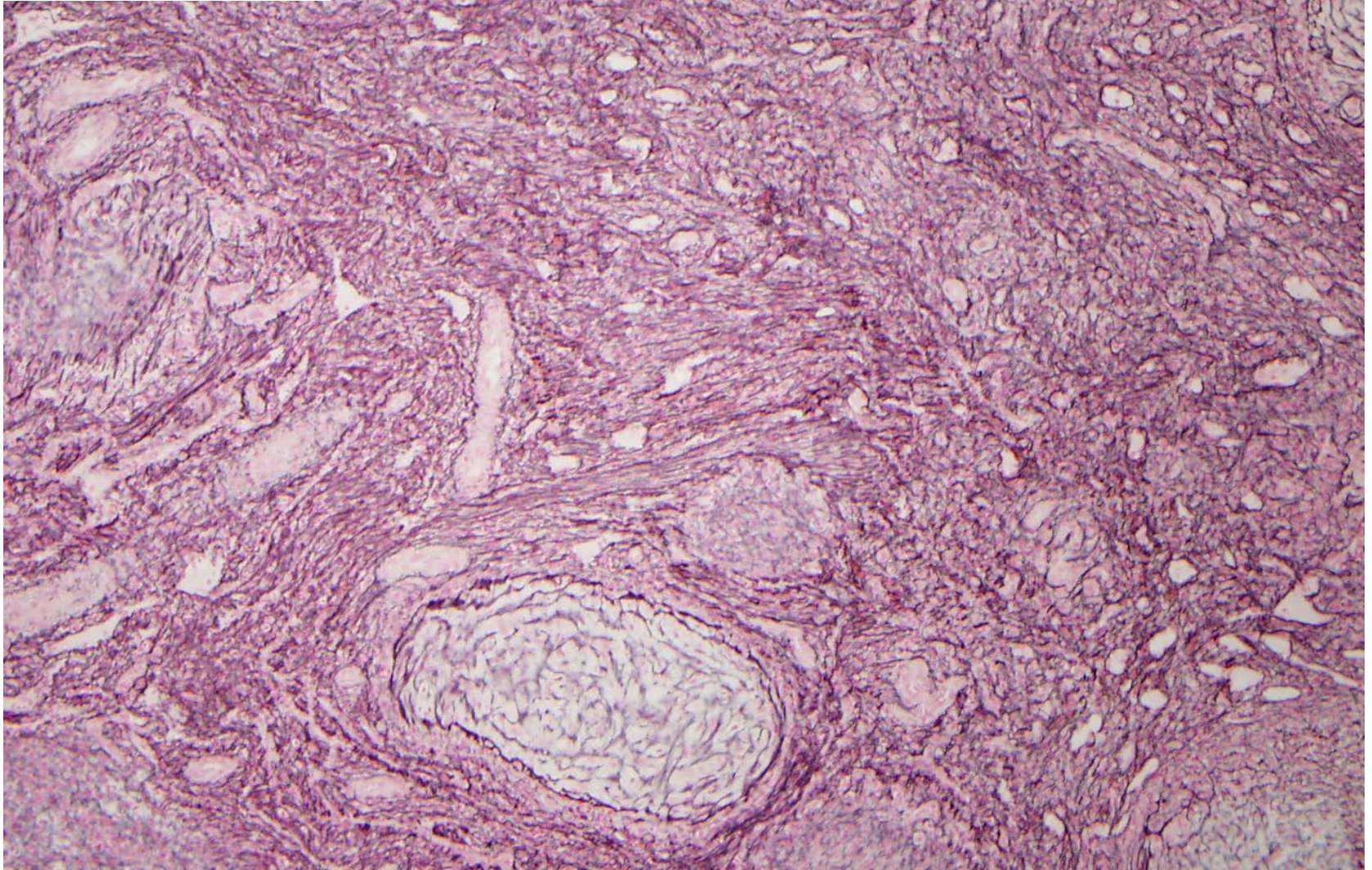


Muscle Actin





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

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