DIAGNOSTIC SLIDE SESSION

2016

CASE 2016-3

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HPI:
- 23-year-old previously healthy female
- Presented to Ophthalmology for bilateral scleritis with new symptoms of right ear chondritis
- Referred to Rheumatology for further work-up

Neurologic exam:
- Alert and oriented x 3, CN 2-12 grossly intact
- 5/5 strength, normal sensation, normal range of motion
- Reflexes intact
RADIOLOGIC STUDIES

Chest radiograph:
2.9 cm round opacity projecting just above the aortic arch

CT:
Posterior mediastinal mass extending from the left T3-T4 neural foramen
BIOPSY
RESECTION
DIFFERENTIAL DIAGNOSIS?
IHC SUMMARY

• Immunopositive: S100 (lipoblast-like cells), BCL1, and CD68
• Immunonegative: AE1/AE3, SOX10, and EMA
• Ki67 proliferative index: <1%
CYTOGENETICS AND MOLECULAR GENETICS

Fluorescence in situ hybridization (FISH)

• FUS gene rearrangement: Negative

• C11orf95-MKL2 fusion gene: Positive
C11orf95 Spanning probe
MKL2 Spanning probe
FINAL DIAGNOSIS:

CHONDROID LIPOMA
Chondroid Lipoma
A Unique Tumor Simulating Liposarcoma and Myxoid Chondrosarcoma

Jeanne M. Meis, m.d., and Franz M. Enzinger, m.d.

Clinical
- Subcutaneous or deep soft tissues
- Extremities or trunk
- 2nd-3rd decade (females > males)
- No recurrence or metastasis
- Local excision is curative

Pathologic
- Mature adipose, myxochondroid matrix, vacuolated cells
- +S100, CD68, keratin (1/3)
- -EMA, HMB45, Actin
- t(11;16)(q13;p12-13) c11orf95-MKL2
• **MKL2 gene**
  - Gene in the myocardin/megakaryoblastic leukemia gene family
  - Codes for a 1049 amino acid myocardin-like protein that can act as a transcription factor

• **C11orf95 protein**
  - Function yet to be determined
PATIENT UPDATE

• Patient doing very well: denies fevers, chills, sweats, wound difficulty, drainage, weakness of extremities, or incontinence

• Post-operative pain/spasm still present but improving daily

• MRI: No evidence of residual or recurrent disease
CONCLUSION

- Rare soft tissue neoplasm most often occurring in young women in the extremities
- May cause concern due to size and presence of lipoblasts
- Behave in a benign fashion
- Small biopsies and uncommon locations may cause diagnostic confusion
REFERENCES


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