

A Rare Case of Lymphoma Presenting as a Seemingly Benign Scalp Mass



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Background

Benign head and neck masses such as sebaceous cysts are very common and are frequently encountered by otolaryngologists. These masses are often removed without any additional tests or imaging. However, otolaryngologists should be aware that sometimes malignant lesions can have a nearly identical presentation.

Patient Case

History of Present Illness:

The patient is a 70 female with a slowly-growing left forehead mass which had been present for several months. She denied any symptoms related to the mass. She had seen several other providers and was referred to facial plastics for removal.

Exam

On exam, there was a 4 x 3cm nontender compressible mass in the subcutaneous tissue of the left forehead just along the hairline. Head and neck exam was otherwise within normal limits. Ultrasound of the lesion demonstrated a 2.3 x 1.7 x 3.8 cm avascular cystic mass along the hairline consistent with a sebaceous cyst.

Surgery

The patient elected to undergo excision of left forehead mass. A 1.5 cm incision made overlying the mass. No cyst was identified in the subcutaneous tissues. Periosteum was identified and the mass appeared to be deep to periosteum. A palpable calvarial defect was noted surrounding the soft tissue mass. Abnormal polypoid tissue was identified deep to periosteum and a biopsy was taken. The patient was referred for CT head after noting the presence of a calvarial defect.

Imaging

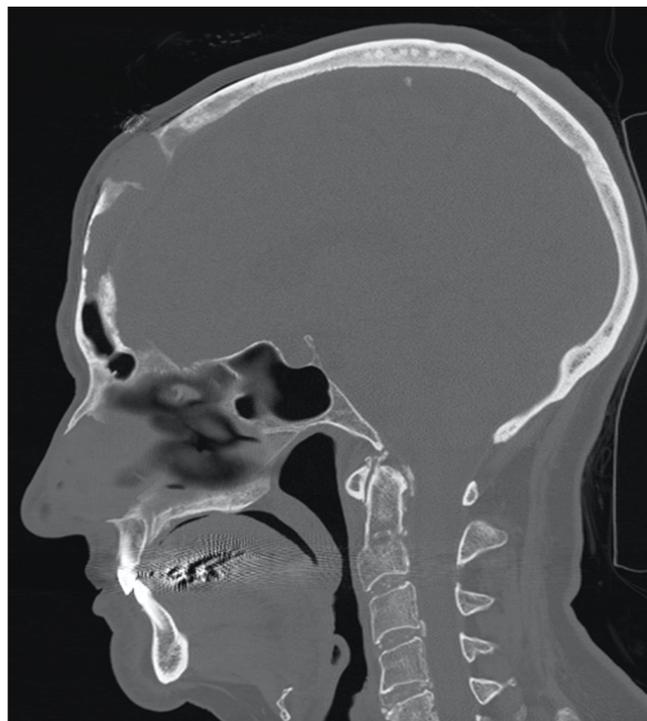
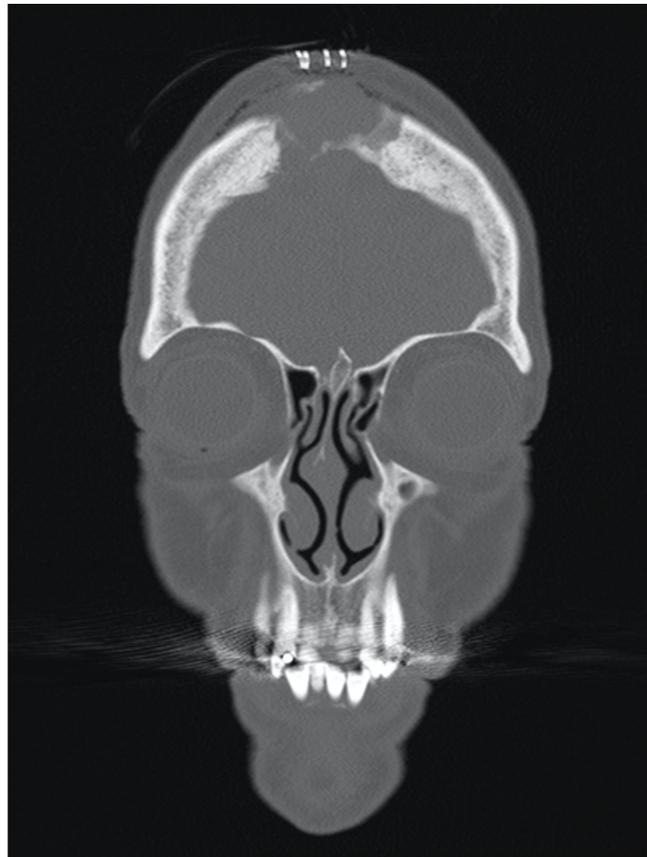
CT head demonstrated a 2.2 x 2.4 x 5.5cm expansile lytic lesion involving anterior frontal bone with extra-axial and subgaleal extension with additional non-expansile lucent lesions in the frontal bones bilaterally.

Pathology

Intraoperative pathology was consistent with diffuse large B-cell lymphoma (DLBCL)

Next Steps

A CT of the chest, abdomen, and pelvis was recommended to evaluate for other sites of disease. The patient was referred to medical oncology for treatment of diffuse large B-cell lymphoma.



Discussion

DLBCL represents a heterogeneous spectrum of disease, with ranges in molecular markers, symptomatology, and prognosis. The most common presentation is that of a rapidly growing tumor which often involves a lymph node. The GI tract is most frequently involved, but primary tumors have been documented in virtually all tissues¹. Only about a third of patients will report the classic constellation of fever, weight loss, and night sweats¹.

Diagnosis of DLBCL typically requires an excisional biopsy and cannot reliably be diagnosed based on symptoms or exam

findings. As with this case, physical exam can be deceiving and benign and malignant lesions can present in a very similar manner. Malignant lesions are not always accompanied by consistent warning signs or symptoms. This concept is illustrated in a case study of two immunocompetent patients with DLBCL who presented with cranial masses - one patient presented with swollen cervical lymph nodes while the other was completely asymptomatic².

At present, there are limited case reports of DLBCL presentations mimicking a sebaceous cyst. At one institution, a 15-year retrospective analysis found that 0.3% of 13,746 masses initially diagnosed by ultrasound as sebaceous cysts turned out to be malignant³. The majority of these malignant nodules were squamous cell carcinoma, and subsequent review of physician notes found evidence of clinical suspicion at initial evaluation.

A separate case study used fine-needle aspiration to evaluate a nodule that by ultrasound was consistent with a sebaceous cyst, but by CT demonstrated an ill-defined mass extending through the scalp. This nodule, which had no underlying bone involvement, was definitively diagnosed by FNA as CD20+ BCL6+ lymphoma⁴.

Conclusions

CT scans and fine-needle aspiration biopsies are not routinely used to evaluate benign masses like sebaceous cysts based on physical exam or ultrasound findings. However, as seen in this case and the others mentioned in the discussion section, on rare occasions these seemingly benign masses can be malignant. Appropriate caution is warranted with head and neck masses even when seemingly benign, as malignant pathology involving critical structures may sometimes be encountered unexpectedly.

References

1. Li S, Young KH, Medeiros LJ. Diffuse large B-cell lymphoma. *Pathology*. 2018; 50:74-87.
2. Tashiro R, Kanamori M, Suzuki H, et al. Diffuse large B cell lymphoma of the cranial vault: Two case reports. *Brain Tumor Pathol*. 2015; 32:275-280.
3. Gargya V, Lucas HD, Wendel Spiczka AJ, Mahabir RC. Is routine pathologic evaluation of sebaceous cysts necessary?: A 15-year retrospective review of a single institution. *Ann Plast Surg*. 2017; 78:e1-e3.
4. Khatib Y, Dande M, Patel RD, Makhija M. Primary cutaneous large B-cell lymphoma of scalp: Case report of a rare variant. *Indian J Pathol Microbiol*. 2017; 60:268-271.