the lesion may be necessary to have accurate diagnosis. After identification of the plane between 2 bones, the outer bulging pathological bone with the organizing hematoma is excised. The inner real calvarial bone is maintained and secured in place. There is no need to expose the dura if the outer table can be shaved off and the intervening hematoma excised leaving behind the inner table in continuity. Early operation gives a satisfactory outcome and a good head contour due to molding. Thus, it is prudent to get X-rays or CT scanning if the hematoma has not resolved within 6 weeks after birth. It not only confirms the diagnosis and rules out other conditions but also delineates the extent of the lesion in all 3 dimensions, identifying the state of the organizing hematoma and thickness of calcification. This will also give an idea of the state of the underlying brain parenchyma, help in planning operation, and anticipate blood loss. Early surgery is easy and a good head shape is obtained due to the natural molding process. The outcome is mostly good, provided blood loss is managed efficiently. However, the risk of excessive blood loss in a small child with limited blood volume, and chances of dural and brain parenchymal injury with faint possibility of recurrence might persuade one to try conservative methods, which by and large do not help the patient. The lesion may continue to grow and might cause pressure over the developing brain, causing focal neurological deficits and even raised intracranial pressure in neglected children with a fused fontanelle, and if it remains evident externally it might affect the patient’s head shape and psychology. Besides, the family continues to suffer due to the stress of unknown outcome, and repeated hospital visits add to the mental, social, and financial burden of the family. Surgery at a later age is usually much more extensive, prolonged, and difficult, and good head shape may not be obtained.

CONCLUSIONS

Ossified cephalhematoma is a rare clinical entity. Even though cephalhematoma is frequently encountered, ossified cephalhematoma is seen only sporadically. We report a 13-week-old boy who was admitted to neurosurgery clinic with deformity of the skull and diagnosed as having ossified cephalhematoma. We discussed diagnosis, pathogenesis, and treatment of ossified cephalhematoma.

REFERENCES


**18**F-Fluorodeoxyglucose-Positive Warthin Tumor in a Contralateral Cervical Lymph Node Mimicking Metastasis in Tongue Cancer Staging With PET/CT

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Abstract: We report 18F-fluorodeoxyglucose-positive Warthin tumor in a contralateral cervical lymph node mimicking metastasis in tongue cancer staging with positron emission tomography/computed tomography.

Key Words: FDG positron emission tomography/computed tomography, Warthin tumor, cervical lymph node metastasis

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Received December 28, 2011.

Accepted for publication June 26, 2012.

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The authors report no conflicts of interest.

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ISSN: 1049-2275
DOI: 10.1097/SCS.0b013e318266f750
due to false-positive FDG uptake caused by inflammation, infection, or benign tumors. We report FDG-positive Warthin tumor (WT) in a contralateral cervical lymph node that mimicked tongue cancer metastasis on PET/CT.

**CLINICAL REPORT**

A 77-year-old female smoker was referred to our department with pain of the right lateral border of the tongue. The lesion with ulcer on the lateral border of the tongue was 18 × 13 mm. After incisional biopsy, pathological diagnosis was squamous cell carcinoma. Contrast-enhanced CT showed an enlarged cervical lymph node (15 × 11 × 10 mm) at contralateral level II (Fig. 1). FDG-PET/CT revealed maximum standardized uptake values of the primary site and the contralateral cervical lymph node were 2.2 g/mL and 3.7 g/mL, respectively (Fig. 2). There was no distant metastasis. As salivary gland tumor in the lymph node or contralateral lymph node metastasis was suspected, fine-needle aspiration of the lymph node was performed for N staging. However, the cells on the fine-needle biopsy were red blood cells and inflammatory cells. Therefore, excisional biopsy was performed. Histopathological examination revealed oncocytic cells lined a cystic space, and there was a dense population of lymphocytes in the stroma (Fig. 3). The features were typical of WT. Therefore, we diagnosed tongue cancer as T2N0M0 and the patient underwent only partial glossectomy. The patient’s postoperative course was uneventful, and there has been no recurrence and metastasis 6 years after surgery.

**DISCUSSION**

WT is the second most common benign parotid tumor, and extraparotid WTs are extremely rare and sometimes can be multicentric. Most extraglandular WTs occur in the periparotid lymph node at level II or III and involve ectopic salivary gland tissue in the lymph node. The incidence of such tissue in the lymph node was reported to be 12% (31/257 oral cancer patients who underwent neck dissection). Malignant transformation of WT is extremely rare, with an incidence of 0.07–0.3%. WTs in the cervical lymph nodes mimicking metastasis in oral and oropharyngeal cancer patients have been reported previously by several authors, and all WTs were in ipsilateral lymph nodes.

As most enlarged lymph nodes result in the misdiagnosis of metastasis, extraglandular WTs are usually discovered as an incidental finding on pathological examination of neck dissection for primary oral cancer. To our knowledge, the present case of tongue cancer is the first report of WT in a contralateral cervical lymph node mimicking metastasis in oral cancer. Contralateral cervical lesion in oral cancer patients must be managed carefully to avoid redundant neck dissection. Therefore, we reported this case with educational value since the differential diagnosis of a cervical mass is important as N staging can affect the treatment.

Although extension of a primary oral cancer to the midline increases the risk of contralateral lymph node metastasis, Woolgar reported a low incidence of 2.5% (9/359 patients). Tongue cancer concomitant with only contralateral lymph node metastasis is extremely rare, with an incidence of 0.9% (1/116 patients). Moreover, 1 of 83 patients (1.2%) with cancer of the lateral border of the tongue staged pN2c had only contralateral lymph node metastasis. Because we suspected benign tumor in the lymph node rather than only contralateral lymph node metastasis on FDG-PET/CT in a patient with cancer of the lateral border of the tongue, we performed excisional biopsy to confirm the N stage and the lymph node lesion was diagnosed as WT.

The role of FDG-PET/CT has come to be more important in the diagnosis and staging of head and neck cancer in recent years. However, FDG uptake is not specific for malignant tumors. Despite the high accuracy of FDG-PET/CT, there are potential pitfalls of FDG uptake by adipose tissue, musculature, inflammatory tissue, and salivary gland. It is important to recognize FDG uptake to avoid false interpretation of benign normal variant as a malignant finding on FDG-PET/CT scans. WT is known to be a benign tumor with high FDG uptake, and Schwarz et al. and Enomoto et al. have reported FDG-positive WTs in cervical lymph nodes that mimicked oral cancer metastasis on FDG-PET/CT. The average maximum standardized uptake value of WT in the lymph nodes including our patient data is 5.8 g/mL (3.7–9.5 g/mL).

The differential diagnosis of lymph node metastasis and WT is difficult, and we should be aware of the potential pitfalls of FDG-PET/CT to avoid inaccurate staging for oral cancer. Although the synchronous manifestation of oral cancer and WT in the lymph node is extremely rare, WT should be taken into consideration in differential diagnosis when evaluating cervical mass at level II or III.

**REFERENCES**


<FIGURE 1. CT showed lymph node metastasis (arrow) at level II on the left side.>

<FIGURE 2. FDG-PET/CT revealed a maximum standardized uptake value of 3.7 g/mL in the enlarged lymph node at left level II.>
Rosai-Dorfman disease (RDD), also named sinus histiocytosis with massive lymphadenopathy, was first reported by Ronald F. Dorfman and Juan Rosai in 1969. It involves the lymph nodes or lymph nodes with extranodal sites. It is a rare, idiopathic, and benign disorder that classically presents as a painless massive bilateral cervical lymphadenopathy. In cases of extranodal presentations, the diagnosis may be confused or missed as the clinical manifestation is similar to the lymphatic system disease. We report a case of extranodal RDD that recurred in the infraorbital region, and discuss the reason and prevention of this recurrence.

CLINICAL REPORT

A 40-year-old male patient was admitted to our hospital with a mass in the left infraorbital region. It was firstly discovered by this patient 10 years ago. The mass was painless, but gradually increased by year. He had an operation by intraoral route in another hospital 6 years ago. However, the history and pathology were missing, and the patient did not get further treatment postoperatively. A year later, the mass recurred in the same place, and the patient refused to undergo a second operation. The painless mass still gradually increased afterwards, and by the time he came to our hospital, it had grown to about 30 mm in diameter. The clinical examination showed that the mass was bulging and adhered to the skin. There was no cervical lymphadenopathy. MRI demonstrated that the lesion was located in the subcutaneous tissue, which was general signal intensity on T1-weighted images and high signal intensity on T2-weighted images (Figure 1). The frontal bone of the maxilla sinus was not damaged. There was also no cervical lymphadenopathy. Laboratory examination was within normal ranges.

As the mass was large, resection of the mass was performed. The extraoral route was applied to cut the affected skin (Fig. 2). Histologic analysis showed large foamy histiocytes, fibril infiltration, and large amounts of lymphocytes, demonstrating emperipolesis. Immunohistochemical stain for S-100, which labeled the histiocytes, was positive, while CD1a lacked expression. These histopathological analyses revealed characteristic features of RDD. And according to the clinical manifestation, cutaneous RDD was confirmed. At 12 months’ follow-up, this patient remains asymptomatic.

DISCUSSION

Rosai-Dorfman disease is a rare and unique condition affecting all age groups. There is a slight male predominance and a mean onset of 20 years. The etiology and mechanism of this disease remain unknown. Immunological investigation indicates that it may relate to the instability of the immune system or autoimmunity, as polyclonal hypergammaglobulinemia (immunoglobulin G) is seen in up to 83% of the patients, and prednisolone showed a good prognosis.

Cutaneous Rosai-Dorfman Disease Recurrence in Infraorbital Region

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Abstract: Rosai-Dorfman disease (RDD), also named sinus histiocytosis with massive lymphadenopathy, is a rare, idiopathic, and benign disorder that classically presents as a painless massive bilateral cervical lymphadenopathy. In cases of extranodal presentations, such as cutaneous RDD, it may not involve the classic manifestation. The diagnosis is usually made by histopathologic analysis. Surgery is suggested in the cases of significant cosmetic deformity or when there is fatal or functional obstruction. We reported a case of extranodal RDD that recurred in the infraorbital region postoperatively.

Key Words: Rosai-Dorfman disease (RDD), sinus histiocytosis with massive lymphadenopathy (SHML), infraorbital region

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Received March 2, 2012.
Accepted for publication June 26, 2012.
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This work was supported by the Science and Technology Commission of Shanghai (08DZ2271100).

The authors report no conflicts of interest.

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ISSN: 1049-2275
DOI: 10.1097/SCS.0b013e31826f6b64

FIGURE 1. MRI manifestation of the lesion.