ก้อนที่ต่อมน้ำลายพาโรติดชนิดออองโคไซโตมา: การติดตาม 3 ปีหลังผ่าตัด

สิรินทร์กาญจน์ สุขดี เพ็ญมาศ ธีระวณิชตระกูล
ภาควิชาโสต ศอ นาสิก คณะแพทยศาสตร์ มหาวิทยาลัยบูรพา

Received: February 13, 2023
Revised: March 20, 2023
Accepted: April 7, 2023

บทคัดย่อ

เนื้องอกชนิดออองโคไซโตมา เป็นเนื้องอกชนิดที่พบได้น้อยกว่าร้อยละ 1 ของเนื้องอกที่ต่อมน้ำลายทั้งหมด โดยพบบ่อยที่สุดที่ต่อมน้ำลายพาโรติดและมักจะมาด้วยอาการก้อนเดี่ยวที่ต่อมน้ำลาย ซึ่งมักไม่พบลักษณะเฉพาะทางรังสีวิทยาและจุลพยาธิวิทยาจากการเจาะชิ้นเนื้อตรวจ การวินิจฉัยโรคนี้จึงเป็นความท้าทายของแพทย์ผู้ตรวจ อย่างไรก็ตาม การวินิจฉัยสามารถยืนยันได้ จากผลพยาธิวิทยาหลังการผ่าตัดก้อนเนื้องอกของต่อมน้ำลาย โดยพยากรณ์ของโรคดี การรายงานผู้ป่วยนี้เป็นผู้ป่วยชายอายุ 60 ปี มีก้อนที่ต่อมน้ำลายพาโรติดข้างซ้ายเป็นเวลา 1 เดือน จากภาพทางรังสีวิทยาพบก้อนขนาด 2.3 เซนติเมตรที่ต่อมน้ำลายพาโรติดข้างซ้าย ลักษณะเป็นเนื้อเดียวกัน ความเข้มระดับปานกลางหลังฉีดสารทึบรังสี เมื่อเจาะชิ้นเนื้อตรวจสงสัยเนื้องอกชนิดพลีโอมอร์ฟิกอะดีโนมา ผู้ป่วยได้เข้ารับการผ่าตัดต่อมน้ำลายพาโรติดทั้งต่อมข้างซ้ายและไม่โดนเส้นประสาทคู่ที่ 7 ผลพยาธิวิทยาหลังการผ่าตัดพบว่าเป็นเนื้องอกชนิดออองโคไซโตมา ปัจจุบันหลังติดตามโดยการตรวจคลื่นแม่เหล็กไฟฟ้า (MRI) 3 ปี ไม่มีการกลับเป็นซ้ำของโรคและไม่มีภาวะแทรกซ้อน

คำสำคัญ: ต่อมน้ำลายพาโรติด เนื้องอกชนิดออองโคไซโตมา การผ่าตัดต่อมน้ำลายพาโรติด

ผู้นิพนธ์ประสานงาน:
สิรินทร์กาญจน์ สุขดี
ภาควิชาโสต ศอ นาสิก คณะแพทยศาสตร์ มหาวิทยาลัยบูรพา
169 ถนนลงหาดบางแสน ตำบลแสนสุข อำเภอเมือง จังหวัดชลบุรี 20131
อีเมล: s.sirinkarn@gmail.com

Parotid oncocytoma: Disease-free with a follow-up of three years after parotidectomy

Sirinkarn Sookdee, Penmas Teeravanittrakul
Department of Otorhinolaryngology, Faculty of Medicine, Burapha University

Abstract

Oncocytoma is a rare benign tumor and represents less than 1% of all salivary gland tumors. Most oncocytomas arise in the parotid gland and usually present as a solitary mass, indentified by nonspecific imaging and fine needle aspiration findings. The lesion is a diagnostic challenge for physician. However, diagnosis is confirmed by histopathology after parotidectomy. The prognosis was excellent. The subject was a 60-year-old man with left parotid gland swelling for a month. Imaging studies revealed a 2.3 cm homogeneous, moderately enhancing soft tissue density lesion over the anterior aspect of left parotid gland abutting the left masseter muscle. Fine needle aspiration showed a benign mixed tumor (suspected for pleomorphic adenoma). He was successfully treated with left total parotidectomy and sparing facial nerve surgery. The pathological report showed oncocytoma. Nowadays, the patient is disease free with a follow-up MRI of three years and no complications.

Keywords: parotid gland, oncocytoma, total parotidectomy

Corresponding Author:
Sirinkarn Sookdee
Department of Otorhinolaryngology, Faculty of Medicine, Burapha University
169 Long-Had Bangsaen Road, San Sook Sub-district, Mueang Chonburi District, Chonburi 20131, Thailand
E-mail: s.sirinkarn@gmail.com

Background

Oncocytomas are rare tumors and represent less than 1% of all salivary gland tumors.[1,2] Most oncocytomas arise in the parotid gland and usually present as a painless, solitary mass that mainly affect the age groups of sixth to eighth decades.[1,3] Diagnosis is confirmed by histopathology after parotidectomy. The tumor consists of oncocytes with many hyperplastic mitochondria.[4] The oncocytes present conditions ranging from hyperplasia to malignant lesions, however the presence of true oncocytes within the entire lesion is a hallmark of oncocytomas. Histopathologically there are three distinct types: oncocytosis, oncocytoma (the most common form) and oncocytic carcinoma.[5] The treatment of choice is complete surgical removal with superficial or total parotidectomy.[6] Recurrence is unusual and probably results from incomplete initial resection. Malignant transformation is occasionally reported.[7] Long-term follow-up using imaging is recommended to evaluate tumors and the prognosis is excellent.[8]

Case presentation

A 60 years old man came with swelling on the left inferior auricular area for a month, approximately 2 centimeters. Mild tenderness on palpation of the mass was noted. There was no palpable cervical lymphadenopathy or other mass.

Imaging studies revealed a 2.3 cm homogeneous, moderately enhancing soft tissue density lesion over the anterior aspect of left parotid gland abutting left masseter muscle. This mass was lateral to the left retromandibular vein and showed a smooth outline without adjacent organ invasion. The adjacent mandible revealed no destruction. There was no malignant-looking bone destruction. No significant enlarged node was seen (Figure 1).

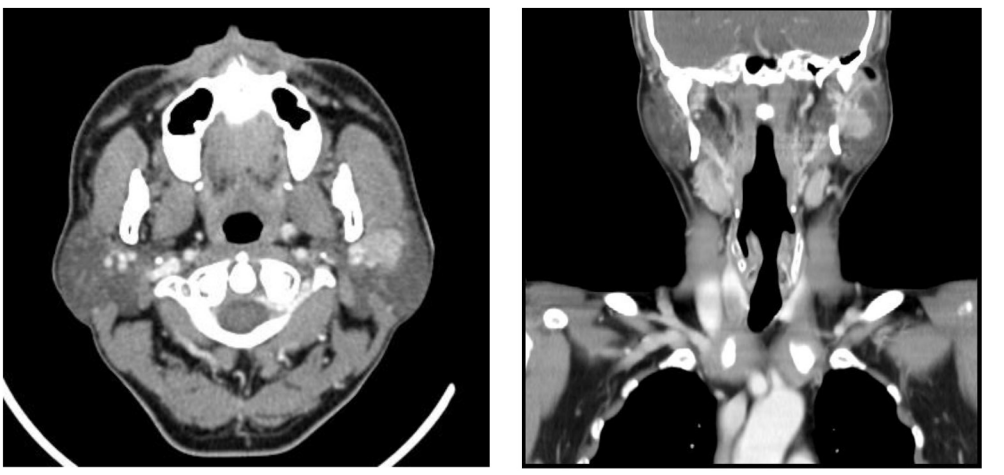


Figure 1 Computerized Tomography (CT) scan with the presence of the left parotid mass

Fine needle aspiration (FNA) showed sialadenitis and benign mixed tumor (suspected for pleomorphic adenoma) that the cytology smears showed focal clusters of myxomatous stromal cells and myoepithelial cells (Table 1).

Table 1 Pathological report

	Pathological report
FNA (First)	Suspected for sialadenitis
FNA (Second)	Suspected for pleomorphic adenoma
Left parotid gland, excision	Oncocytoma, size 1.7 cm in diameter Resection margins are free

He was successfully treated with left total parotidectomy and sparing facial nerve surgery. Pathological report showed oncocytoma (Figure 2).

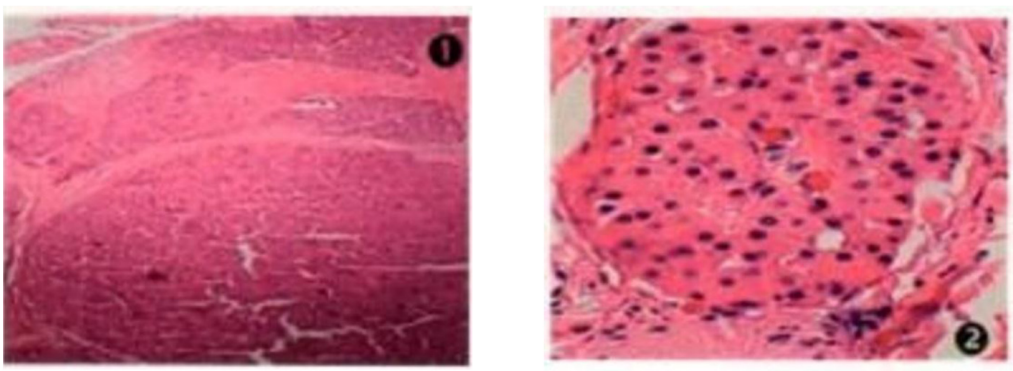


Figure 2 Pathological report of left parotid gland; A well-circumscribed lobulated mass of sheets and trabeculae of monotonous large polygonal cells with well-defined cell borders, deeply eosinophilic, granular cytoplasm, small round nuclei and inconspicuous nucleoli. No mitosis or necrosis is seen. All resection margins are free. The non-neoplastic parotid gland is unremarkable.

Discussion

Parotid oncocytomas present a diagnostic challenge to clinicians by extremely low prevalence and there are nonspecific imaging and fine needle aspiration findings. Currently, the radiological and histopathological findings of these tumors have been documented in the literature largely in the form of case reports and case series.[9]

For the assessment of salivary gland tumors, CT scan is one of the first-line imaging.[10] Parotid oncocytoma is described as well-defined mass with heterogeneous enhancement, which may lead to diagnostic possibilities of

Warthin's tumor, pleomorphic adenoma and other low-grade malignancies.[6] However, CT findings of our case showed homogeneous, moderately enhancing soft tissue mass. The variability of radiologic findings are the diagnostic challenges of this tumor.

Moreover, the oncocytes are mitochondria-rich cells that have highly eosinophilic granular cytoplasm, low nuclear to cytoplasmic ratio, and prominent single nucleolus. Cytology demonstrates sheets of oncocytes devoid of lymphoid cells compared to the Warthin tumors, which besides sheets of oncocytes, also contain numerous lymphocytes in their background.[11,12] Oncocytic features may be seen in tumors that include pleomorphic adenoma, mucoepidermoid carcinoma, and rarely acinic cell tumors, salivary duct carcinoma and the uncommon oncocytic papillary cystadenoma. Diagnostic pitfalls in FNA have been well documented in the literature.[13] Reported sensitivity of fine needle aspiration in detecting oncocytic neoplasm is only 29%.[12]

Complete surgical resection with superficial or total parotidectomy is the treatment of choice and performs histopathological confirmation. Recurrent tumor after surgery can be seen in 20%-30% of patients with residual tumor, but malignant transformation is reported. MRI after 1 and 2 years is recommended to monitor for recurrence due to most head and neck cancers recur within the first 2 years[1,14] FNA findings of our case were reported as a sialadenitis and pleomorphic adenoma, respectively. Finally, the histopathology of the parotidectomy specimens showed oncocytoma. After total parotidectomy, this patient is disease free with a follow-up MRI of 5 years. He has no postoperative complications.

Conclusion

Oncocytomas of the parotid gland are rare benign tumors and present a diagnostic challenge for clinicians due to a nonspecific imaging and fine needle aspiration findings. Oncocytoma should be considered the differential diagnosis of unilateral parotid mass. Although imaging and FNA are the important preoperative diagnostic tools, pitfalls are present. A combined clinical, radiological and histopathological assessment is essential in making an accurate diagnosis.

Acknowledgements

The authors would like to thank Asst. Prof. Sornsupha Limchareon, MD. for the radiographic review and Komgrid Charngkaew, MD. for pathological review.

Funding information

None

Conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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