



A Case of Multifocal Bilateral Parotid Gland Pleomorphic Adenomas

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Introduction

Parotid gland pleomorphic adenomas are the most common benign salivary gland neoplasm¹, and are usually single and unilateral². Although benign, they are still excised to preserve facial nerve function, cosmetic symmetry, or to prevent malignant transformation. If not completely removed however, recurrence has been seen to occur in a multifocal pattern in the same parotid gland¹⁻². Prior reports have also described cases of primary multifocal pleomorphic adenomas with no antecedent surgery, trauma, or radiation therapy, but have all been unilateral³⁻⁵. Here, we describe a unique case of multifocal bilateral pleomorphic parotid gland adenomas, not previously described in the literature.

Objectives

1. Describe a new presentation of multifocal bilateral pleomorphic parotid adenomas.
2. Implement our approach to treatment and a review of the literature regarding parotid adenomas.

Case

The patient is a 59-year-old female with a 30 year history of a left parotid mass, excised via superficial parotidectomy 24 years ago, in 1992, at an outside institution. She subsequently had inconsistent follow up on the outside. A CT scan in 2007 showed bilateral intra-parotid masses, but underwent no further evaluation or treatment. A CT scan in 2015 showed bilateral multifocal enhancing, partially cystic masses within the parotid glands, with 3 masses in the right parotid gland, ranging in size from 2.8-3.6 cm in diameter, and 4 masses in the left parotid gland, ranging in size from 2.1-7.9 cm. There were no other neck masses, and her skin exam revealed a left parotidectomy scar. She had no symptoms to suggest distant disease. Needle biopsies of both parotid gland masses showed pleomorphic adenomas. Because the masses on the right deep lobe mass extended into the parapharyngeal space, with mass effect and the patient being symptomatic with dysphagia, the right parotidectomy was performed first with facial nerve preservation. Five months later, the completion left parotidectomy was performed with facial nerve preservation.



Discussion

We present a new case of multifocal bilateral pleomorphic parotid adenomas. Only cases of unilateral multifocal pleomorphic parotid adenomas have previously been described in the literature⁶⁻⁷, with an incidence of 0.5% in patients without history of trauma or surgery to the area. Molecular studies demonstrated that the separate nodules, when present in these cases of unilateral multifocal parotid pleomorphic adenomas, were clonally related, supporting the theory of seeding of the adenoma to different parts of the same parotid gland⁸. Here we report a novel case of a patient with the puzzling circumstance of multifocal pleomorphic adenomas in not only the right parotid gland which had been operated on, but also in the left parotid gland, which had never been subjected to trauma or surgery.

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