Parapharyngeal space tumors come in many varieties. They range from neurogenic to salivary gland type tumors. Salivary pleomorphic adenomas are more common and neurogenic schwannomas are rare. This case report describes the clinical course of a 25 year old female who presented with a painless enlarged tonsil. CT and MRI scan reports were consistent of a pleomorphic adenoma of the deep parapharyngeal space. However, in surgery this did not fit the look of the tumor. Later, pathology confirmed a schwannoma. On first glance things are not always as they appear. This case illustrates the necessity of diagnosing these tumors for workup as well as reiterates the importance of a physical exam in any medical specialty.

Case Presentation

A 25 year old female presents to the clinic for evaluation of an enlarged left tonsil. The patient had noticed it three years prior, and was asymptomatic at that time. The patient thought about it a second time when she was in medical school during a routine clinical practice day. She assumed she would be coming down with a cold soon to explain the enlargement. It was not until the end of her second year of medical school when the patient complained of frequent sore throats and finally came into the office. When having sore throats the patient said both tonsils would swell but always the left more than the right. The patient denies any throat pain, issues with speaking or swallowing, or weight loss. The patient stated she had annual physicals from her primary care doctor, as well as teeth cleanings bi-annually, and nothing was mentioned. There was no significant past medical or surgical history. Patient’s family history was non-contributory. The patient was not on any medication, a non-smoker, social drinker, and had no known drug allergies.

On physical exam the patient’s vitals were 98.2°F, 80 bpm, blood pressure of 118/76, RR12, and 98% on room air. Head was normocephalic, atraumatic. Nares were patent bilaterally, and turbinates were moist. No cervical lymphadenopathy was palpated. The patient mentioned seeing primary care for physical exams as well as a dentist during the time period she had the mass. Perhaps the throat was not examined during those routine exams. As medical students we are taught to do physicals head to toe on every patient. Some clinicians feel they do not need to perform a full physical exam due to their years of experience. They are able to filter out the unnecessary details and focus on what is most important. In this case, if the tumor could have been caught earlier when it was smaller, it would not have ever reached the carotid sheath and other important structures. This would have made the surgical risks lessened, as well as decreased time in the operating room. Most parapharyngeal space tumors will be found incidentally on routine exams. If these tumors are not diagnosed early, the results can be devastating. Even a slow growing benign tumor can eventually cause nerve damage, bone remodeling, and airway obstruction. In the case of malignant parapharyngeal space tumors, the effects can be even more disastrous and can lead to death.

Image 1

Image 2 and 3

Image 4 and 5

Image 6

Image 1 - Patient’s oropharynx, demonstrating left sided mass protruding medially towards the uvula midline.

Image 2 and 3 - Patient’s neck CT scan demonstrating left sided parapharyngeal mass.

Image 4 and 5 - Patient’s neck MRI, Coronal and Transverse views, respectively.

Image 6 - Patient’s tumor after removal.

In conclusion, parapharyngeal tumors come in many varieties. They range from neurogenic to salivary gland type tumors. Salivary pleomorphic adenomas are more common and neurogenic schwannomas are rare. This case report describes the clinical course of a 25 year old female who presented with a painless enlarged tonsil. CT and MRI scan reports were consistent of a pleomorphic adenoma of the deep parapharyngeal space. However, in surgery this did not fit the look of the tumor. Later, pathology confirmed a schwannoma. On first glance things are not always as they appear. This case illustrates the necessity of diagnosing these tumors for workup as well as reiterates the importance of a physical exam in any medical specialty.

Discussion

Due to the tricky location of parapharyngeal tumors they can be difficult to discover. Some patients may have throat pain, but most will be asymptomatic. One particular case discussed a patient with painful TMJ. This patient with persistent TMJ pain was found to have a carcinoma in the parapharyngeal space. Another symptom that can be involved with these tumors is Eustachian tube dysfunction. TMJ dysfunction as well as Eustachian tube dysfunction are common disorders that many patients will see an osteopathic physician for hand on treatment. One technique is the Galbraith maneuver. The Galbraith maneuver helps open up the Eustachian tube via a pumping motion. Primary care physicians should keep this type of rare tumor in the back of their minds, and consider further evaluation with imaging, especially if the patient is not improving with treatment. Usually, the tumor is at least two centimeters before it can be seen as a mass, making prompt imaging and treatment crucial.

Another point of discussion deals with physical exam findings. The patient mentioned seeing primary care for physical exams as well as a dentist during the time period she had the mass. Perhaps the throat was not examined during those routine exams. As medical students we are taught to do physicals head to toe on every patient. Some clinicians feel they do not need to perform a full physical exam due to their years of experience. They are able to filter out the unnecessary details and focus on what is most important. In this case, if the tumor could have been caught earlier when it was smaller, it would not have ever reached the carotid sheath and other important structures. This would have made the surgical risks lessened, as well as decreased time in the operating room. Most parapharyngeal space tumors will be found incidentally on routine exams. If these tumors are not diagnosed early, the results can be devastating. Even a slow growing benign tumor can eventually cause nerve damage, bone remodeling, and airway obstruction. In the case of malignant parapharyngeal space tumors, the effects can be even more disastrous and can lead to death.