Schwannoma of Cheek Mucosa

Anureet Kaur, Puneet Kaur and Rimpi Sarin
Department of Pathology, Giansagar Medical College and Hospital, Banur, Dist Patiala, Punjab

Abstract: Schwannoma is a relatively uncommon, benign, encapsulated, slow growing, usually solitary tumour that originates from Schwann cells of the nerve sheath derived from the neuroectoderm. Only 1% of Schwannomas have intra-oral of which most common site is tongue followed by the palate, floor of mouth, buccal mucosa, lips and jaws. We report a case of Schwannoma in cheek mucosa within oral cavity which was surgically removed and on histopathological examined revealed Schwannoma with Antoni A and Antoni B patterns with Verocay body formation.

Keywords: Schwannoma, cheek mucosa

Introduction

Benign peripheral nerve tumours of oral cavity include Schwannomas, Neurofibroma, Nerve sheath myxomas, mucosal neuroma, traumatic neuroma and granular cell tumour. Intra-oral location is uncommon(6). Schwann cells arise during 4th week of derived from a specialized population of ectomesenchymal cells of the neural crest, which then detach from neural tube and migrate into the embryo. Schwann cells form a thin barrier around each extracranial nerve fiber and wrap layer fibres with an insulating myelin sheath to enhance nerve conduction. S nerves exit the brain and spinal cord, there is change between myelinization by oligodendrocytes to myelinated by Schwann cells. Schwannoma cells form a tumour mass encompassing motor and sensory peripheral nerves. Variants of Schwannoma include: classic, cellular, plexiform, epithelioid, ancient and melanotic (2). Schwannoma, also known as Acoustic neurinoma or perineural fibroblastoma, is a rare benign neural tumour arising from neural sheath Schwann cells of the peripheral, cranial, or autonomic nerves (5). About 25-40% of total Schwannoma cases have been reported in Head and Neck region. Out of these only. Only 1% are reported in oral cavity (4). Malignant change in Head and Neck Schwannomas is rare, with incidence varying between 8 to 13.9% (2). Schwannoma, usually, is solitary, asymptomatic mass, slow growing but may undergo a sudden increase in size.

These are usually painless unless they compress adjacent nerves (6). We report a case of Schwannoma located in cheek (intra-oral), in a 49 year old male, for its rarity.

Case Presentations

A 49 year old male presented to surgical out patient department with complaints of a painless mass in oral cavity (mucosa of cheek) of 15 yrs duration. There was no history of pain, paraesthesia or recent increase in size of the mass. The patients’ medical history was non-contributory. Clinical examination revealed a 3X2 cm mass which was firm in consistency and non tender. It was not fixed to underlying tissue or overlying mucosa. A provisional diagnosis of retention cyst/adenoma was given. The lesion was excised and post operative course was uneventful. Patient is on regular follow up. Gross examination showed a grey white soft tissue mass of 2.8X2 cms with occasional foci of hemorrhage on cut section. Microscopic examination of H&E stained sections showed fascicles of spindle shaped cells arranged in palisading fashion along with formation of Antoni A and Antoni B areas. Verocay body formation was seen. Foci of hemorrhage, dilated blood vessels and hyalinization were also noted (Fig.1). Immunohistochemistry showed nuclear and cytoplasmic positivity for S-100 (Fig.2). A histopathological diagnosis of Schwannoma was made

Discussion

Schwannomas are painless, benign and slow growing solitary tumours first described by Verocay (7). Schwannomas may be found in any part of body but tend to occur in Head and Neck region flexor surfaces of upper and lower extremities (8). Between 25-45% of
all reported Schwannomas are found in Head and Neck region. These sites include parapharyngeal space, neck, paranasal sinuses, nasal and oral cavities, face, scalp, intra-cranial cavity and larynx\(^{(8)}\). They are more common in males \(^{(9)}\), and can occur at any age. Male to female ratio of schwannomas has been reported as 3:1. \(^{(10)}\). Our patient, a 49 year old male presented with history of mass on inner side of cheek which was asymptomatic and slow growing. In oral cavity, it is usually seen in soft tissues most commonly in tongue, followed by palate, buccal mucosa. Schwannomas are usually slow growing, circumscribed swelling without any particular features to distinguish from other benign soft tissue lesions. Preoperative diagnosis of which is difficult because many Schwannomas do not present with neural deficits and several differential diagnosis for tumours of neck and masses may be considered including paraganglioma, branchial cleft cyst, malignant lymphoma and metastatic cervical lymphadenopathy. Due to their rarity, these tumours are not even taken into consideration in differential diagnosis. Symptoms and signs related to Schwannomas depend on origin of tumours.

References


