

## Case Report-4

# Adenoid Cystic Carcinoma of External Auditory Canal with Vertebral Metastasis

PS SRIDHAR, DN SHARMA, PK JULKA, & GK RATH

### ABSTRACT

**Adenoid cystic carcinoma of external auditory canal is a rare entity. It arises from ceruminous glands. It is similar to adenoid cystic carcinoma of the salivary glands. Surgery followed by radiotherapy is most commonly used. Local recurrence is common. Direct involvement of bone is common. We report a patient of adenoid cystic carcinoma of external auditory canal with vertebral and pulmonary metastasis in an adult female. The clinical features and management of this tumour are discussed.**

### INTRODUCTION

Tumours of external auditory canal are rare. Majority of them are squamous cell carcinoma and adenocarcinoma. Adenoid cystic carcinoma of external auditory canal is extremely rare. It usually arises from ceruminous glands of external auditory canal. They resemble adenoid cystic carcinoma of salivary glands but are known for their aggressive nature. Clinical features and management of adenoid cystic carcinoma of external auditory canal is discussed.

**CASE :** A 30-year old woman presented with pain in right ear of 2 years duration. Examination revealed nodule occupying in the

external auditory canal. She underwent surgical excision in July 1990. Histopathology showed adenoid cystic carcinoma. The margins were free. She received postoperative radiotherapy of 40 Gy in 25 fractions over 5 weeks. She was on regular follow up and asymptomatic until 2002 when she developed cough and chest pain in January 2002. Locally there was no evidence of disease. Contrast enhanced computed tomography of chest revealed bilateral solitary metastases in both lower lobes. She underwent metastatectomy in July 2002. Histologically it was metastatic adenoid cystic carcinoma. She came back again with backache and bilateral lower limb weakness. Examination showed decreased power in both lower limbs without sensory loss. There was tenderness in 12<sup>th</sup> dorsal vertebra. X-ray thoracolumbar spine showed destruction of D-12 vertebra. Contrast enhanced Computed tomography of the chest revealed multiple pulmonary metastases with destruction of D-12 vertebra with collapse and a para spinal soft tissue. Needle biopsy confirmed adenoid cystic carcinoma. Bones scan showed increased uptake in D-12 vertebra. She received dexamethasone and radiotherapy 20 Gy in 5 fractions over 1 week to the D-12 vertebra to prevent cord compression and palliation of pain. She got symptomatic improvement with radiotherapy. She was on palliative chemotherapy with Carboplatin 450mg, 5-fluorouracil 750mg with significant symptomatic improvement till last follow up in Nov 2003.

## DISCUSSION

Tumours of external auditory canal are rare. Squamous cell carcinoma is more common followed by adenocarcinoma, adenoid cystic carcinoma and mucoepidermoid carcinoma. Adenoid cystic carcinoma arises from ceruminous glands. Previously it was known as Ceruminoma or cylindrinoma. But the term adenoid cystic carcinoma of external auditory canal is preferred by most<sup>1</sup>. They usually present as long standing ear discharge, otitis externa or nodules in ear is common. Wide local excision is main treatment. Histopathologically, adenoid cystic carcinoma of external auditory canal resembles adenoid cystic carcinoma of salivary glands. It is composed of small tubular structures and scattered nests with a cribriform pattern. Surgically clear margin is an important prognostic factor. Radiotherapy is used as adjuvant treatment. Post operatively 40-60 Gy of radiation are used.<sup>2</sup> Role of chemotherapy is limited. Local recurrence is common. It usually occurs within 2 ½ years. Apart from surgical margins, involvement of parotid, perineural spread and bony destruction and distant metastases are important prognostic factors.

Pulmonary metastasis is most common distant metastases. Single case report of liver and kidney is also reported<sup>3</sup>. To best of our knowledge metastases to vertebra and spinal cord compression has not been reported earlier.

Long follow up is necessary for this unusual neoplasm as local and distant recurrence is known up to 20 years.<sup>1</sup> Due to small number of cases treatment policy is yet to be defined. Adenoid cystic carcinoma of external auditory canal with metastases to vertebra and lung makes it an unique case. The treating physician should be vigilant about the possibility of metastases.

## REFERENCES :

1. Perzin KH, Gullane P, Conley J. Adenoid cystic carcinoma involving the external auditory canal – A clinicopathological study of 16 cases. *Cancer*. 1982;50(12):2873-83.
2. Koopot R, Ryes C, Pifarre R. Multiple pulmonary metastases from adenoid cystic carcinoma of the external auditory canal case report and review of literature. *J. Cardiovas Surg*. 1973;65(6): 909-13.
3. Mathew RM, Subhashina J, Ponnaiya J, Sridhar GV, Roul RK. Adenoid cystic carcinoma of the external auditory canal with pulmonary, renal and liver metastases. *Ind J Cancer* 1997;34(3):139-42.



IJMPO would like to publish 'Profile of a Cancer Centre' or an Oncology department in a major teaching institute/hospital in India outlining its history, facilities available, and achievements in the field of research, teaching and patient care. Please send your write-up (up to 2000 words) with 2-3 photographs.