

Synchronous Bilateral Acinic Cell Carcinoma of the Parotid

Sourav Guha*, Rajdeep Guha, Kapila Manikantan, Rajeev Sharan, Pattatheyl Arun, Indranil Mallick and Sanjoy Chatterjee

Tata Medical Center, Kolkata, India

Sir,

Acinic cell carcinoma is a rare parotid malignancy and constitute approximately 3% of all parotid tumors [1]. However though bilateral parotid salivary gland tumors are extremely uncommon bilateral acinic cell carcinoma may not be so rare and constitute 3% of all acinic cell carcinomas. There are limited data on the incidence of bilateral acinic cell carcinoma which have been treated over the years [3-6].

A 50 yr old female from Bhutan presented on January 2012 with chief complaints of swelling over right infra auricular region of one month duration. She was initially investigated in Bhutan with a Fine Needle Aspiration Cytology (FNAC) that was reported as acinic cell carcinoma of the right parotid gland. She visited our centre for further treatment option.

On examination there was a 3 x 2.5 cm firm to hard swelling over the right infra auricular region and also a small nodular swelling measuring 1 x 1 cm in the left parotid gland. There was no facial weakness. Laryngeal scope examination revealed adequate airway with a small hemangioma over the right base of the tongue. No neck nodes were palpable. Slide review at our centre was called out as acinic cell carcinoma.

Maxillofacial MRI revealed a well defined and lobulated space occupying lesion measuring 2.7 x 2.5 x 1.6 cm in right superficial parotid gland which was predominantly hypointense on T2W1 and hyperintense on Short TI Inversion Recovery (STIR) sequences. Marginal extension to deep part of parotid lobe was observed. The lesion was closely abutting retromandibular vein. On the left another enhancing space occupying lesion (SOL) measuring 2.1 x 1.6 x 1 cm seen within the superficial parotid gland with pockets of hyperintense foci within the hypointense mass on long triplet repeat (TR) sequences. The deep lobe was free; small nodes seen at level I. Bilateral level II nodes noted largest measuring 1.6 x 0.6 cms. FNAC from left parotid gland was done and reported as neoplastic cells present, basaloid neoplasm. Chest X-ray and blood investigations including complete blood count, renal function test and liver function tests were within normal limits. Patient underwent bilateral total conservative parotidectomy with bilateral level II neck dissection. Histopathology report was called out as Acinic cell carcinoma involving the superficial lobe of right parotid gland and deep lobe of the left parotid gland. The tumor in its greatest dimension measured 2.4 cm on the right side and 3 cm on left side. Perineural invasion was present in both the sides [7]. Level II and intraparotid lymph nodes were negative for malignancy and all the margins were reported to be free of tumor. Post surgery she was treated with external beam radiotherapy to bilateral tumor bed on tomotherapy to a dose of 60 Gy in conventional fractionation (Figure 1 and 2).

Salivary gland tumors comprises of approximately 4% of all head and neck tumors of which almost 80% are parotid gland tumors. Bilateral parotid gland neoplasm is uncommon and bilateral synchronous parotid gland tumors are extremely rare [8,9]. Acinic cell

carcinoma of parotid account for approximately 5% of all salivary gland neoplasms and have the best prognosis with a 10-year relative survival of 88% [1]. Typical clinical feature includes a slowly growing mass in the parotid gland area. They are low grade tumors without frequent involvement of the facial nerve. Mean age of diagnosis is 44 years with a M:F= 2:3. Although these tumors rarely metastasizes occasional late distant metastases have been reported.

We searched for published articles in peer reviewed journals using two search engines: Pubmed - (Medline - The National Library of Medicine) and the Cochrane library. The specified search criteria included: "Bilateral parotid tumor", "Bilateral acinic cell tumor" and

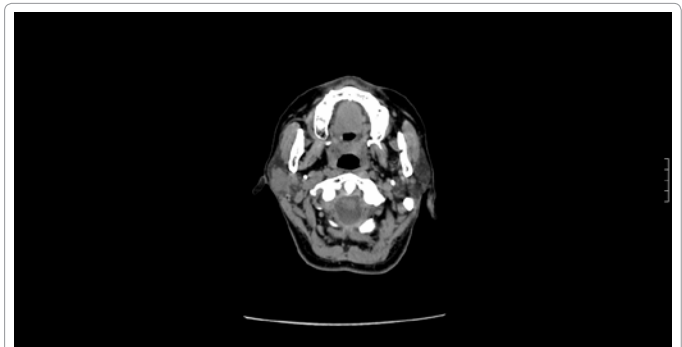


Figure 1: Maxillofacial MRI showing space occupying lesion within the superficial lobe of the parotid gland.

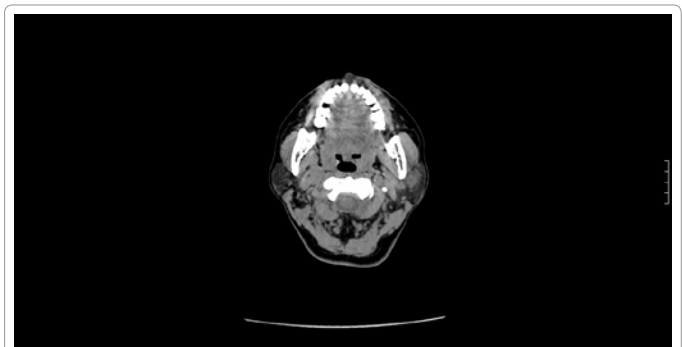


Figure 2: Maxillofacial MRI showing space occupying lesion within the superficial lobe of the right parotid gland with extension to the deep lobe of the parotid gland.

*Corresponding author: Dr. Sourav Guha, MD, Radiation Oncologist, Tata Medical Center, Kolkata, India, Tel: 09903156562; E-mail: drsouravguha@yahoo.com

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“Carcinoma of the parotid and submandibular glands”. The review of literature showed majority of synchronous bilateral parotid malignancies are Acinic cell carcinoma. Bilateral acinic cell carcinoma can be either synchronous or asynchronous and till date only six cases of synchronous bilateral acinic cell carcinoma have been reported in medical literature which have been treated over the years [3-6,9]. To the best of our knowledge we hereby present the seventh case of synchronous bilateral acinic cell carcinoma of the parotid gland.

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