Letters to the Editor

Brain metastasis from carcinoma base of tongue after 9 years of disease free survival

Sir,

Head and neck carcinoma usually metastasizes to lungs (83.4%), bones (31.1%) and liver (6.0%). Brain metastasis is rare and even if it develops, it does after lung metastasis. Distal metastasis usually occurs within 2 years of initial diagnosis and survival with distant metastasis is usually <1-year.

A 67-year-old patient of carcinoma base of the tongue (T1N0M0) was treated with curative dose radiotherapy, that is, 66 Gray in 33 fractions (66 Gy/33#) in 2003. The patient was asymptomatic and was on regular follow-up till 2012. The patient was diagnosed with left sided the complete hemiplegia with lower motor neuron type facial palsy on October 16, 2012. A computed tomography (CT) brain [Figure 1] was done, which revealed a space occupying lesion in right fronto-parietal region. A right sided craniotomy and wide excision of mass were done on November 26, 2012. The histopathology report showed metastatic squamous cell carcinoma [Figures 2 and 3] and the tumor size was 2.5 cm × 2 cm × 1 cm. To exclude the presence of a primary brain tumor, immunohistochemistry was done, which was epithelial membrane antigen positive [Figure 4] and Glial fibrillary acidic protein negative [Figure 5]. This confirmed the diagnosis to be metastatic rather than a primary brain tumor. A positron emission tomography-CT scan was performed to locate the primary foci of the disease [Figure 6], but it came out to be absolutely normal. The primary site, that is, the base of the tongue was also under control.

Figure 2: Tumour cells invading the brain parenchyma

Figure 4: Epithelial Membrane antigen positive (EMA positive)
Whole brain radiotherapy (WBRT) (30 Gray/10#) was delivered and the patient was discharged on December 28, 2012. On first follow-up (29.01.2013), the hemiplegia and facial nerve palsy had improved. Patient was able to walk with support.

A magnetic resonance imaging brain was performed [Figure 7] which showed 18 mm × 17 mm lesion in right parietal lobe. Additional dose radiotherapy (20 Gy/10#) to the tumor bed was delivered (12/02/13–28/02/13). Post therapy, MRI brain scans showed a stable mass of 18 mm × 17 mm, which was not progressing for the past 1½ year. The patient is currently on follow up with all neurological and motor functions intact.

The most common primary tumors which metastasize to the brain are from lung, breast, and gastrointestinal tract.[2] Patients of head and neck carcinoma who have large infiltrating lesion or late survivors of initially advanced disease may develop brain metastasis, but our case was initially in stage I. WBRT is the standard treatment of choice for brain metastasis. Median survival following WBRT is between three to 6 months.[2] Cancer can have rare presentations. Even a stage I carcinoma can present with metastasis after almost a decade. The potential for developing a brain metastasis long after curative therapy argues for extended patient follow-up.[3]

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