

Unilateral tongue atrophy and pulmonary malignancy

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CASE REPORT

An 82-year-old man was referred to the department of pulmonology with a left-sided pneumothorax, which was seen on a chest X-ray requested by his general practitioner. His medical history included a non-small-cell lung carcinoma (NSCLC) T1NoMo in 2009. With the intention to cure, the patient received radiation therapy for the NSCLC in his left lung. However, a few months later, recurrence of the malignancy in the left lung and metastasis to the right lung was observed on follow-up. The patient and his family did not want any further treatment at that time. In the first year, he progressed relatively well but subsequently, he suffered from progressive weight loss. At presentation, 18 months after the diagnosis of pulmonary metastasis, the patient complained of hoarseness. The chest X-ray showed tumour progression as well as a pneumothorax of the left lung. On physical examination, a remarkable finding was observed (*figure 1*).

Figure 1.



WHAT IS YOUR DIAGNOSIS?

See page 35 for the answer to this photo quiz.

DIAGNOSIS

The history of NSCLC, the hoarseness of voice and unilateral tongue atrophy on physical examination suggested a possible diagnosis of metastasis of the NSCLC with subsequent hypoglossal nerve paresis. This diagnosis was confirmed with magnetic resonance imaging (MRI) of the cerebrum, which showed a tumour of the skull basis suspicious of a bony metastasis of the NSCLC. *Figure 2* displays the MRI with a tumour of 3.4 by 4.1 cm, which shows an infiltration into the hypoglossal canal (*marking*). *Figure 3* shows a t2-MRI with a coronal view of the skull with fatty denervation of the tongue.

Despite this metastasis and the difficulty in swallowing as well as aspiration of food, he did not want any further treatment.

Figure 2. *Canalis hypoglossus and tumour suspect for NSCLC metastasis. MRI t1se after gadolineum*

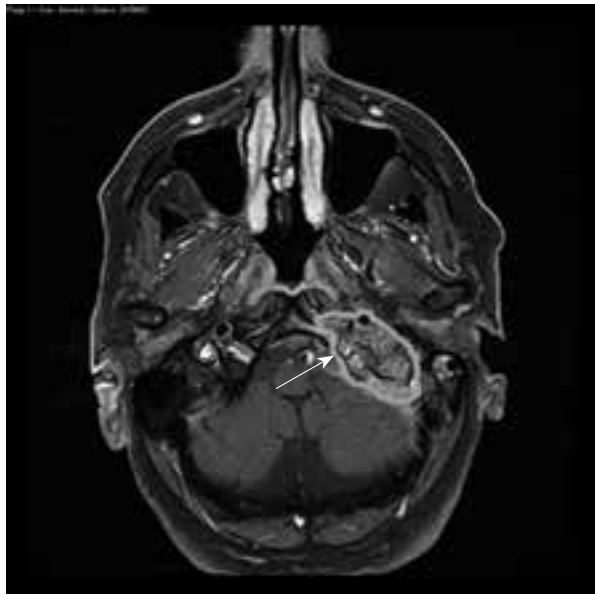


Figure 3. *Fatty tongue denervation. MRI t2cor fat saturation*

