A Tale of Deviation

K Abhilash*, P Manoj**, S Sheetal***

Abstract

Unilateral isolated Hypoglossal nerve palsy may result due to neoplasia, trauma, infections, autoimmune or vascular causes.1 We report a 52 year old male who presented with right hypoglossal nerve palsy and on evaluation was diagnosed to have prostatic malignancy with metastasis to the base of skull. Unilateral hypoglossal nerve palsy as the presenting feature of carcinoma prostate is rarely described. To the best of our knowledge, this is the third case report of unilateral hypoglossal palsy as a manifestation of prostatic carcinoma.

Case Report

Our patient is a 52 year old male, with history of Type 2 diabetes mellitus for past 5 years, on irregular treatment. His complaints started around 6 months back as dysarthria. He was evaluated elsewhere and was detected to have right sided LMN hypoglossal nerve palsy. CT imaging of the paranasal sinuses revealed an asymmetrical soft tissue thickening in the right lateral wall of nasopharynx, which was further confirmed by MR imaging. CT brain was normal. Biopsy from the soft tissue thickening in nasopharynx was done twice which showed lymphoid hyperplasia. It was at this juncture that the patient presented to us. On further assessment, a history of weight loss of more than 10 kg over last 1 year was obtained. He also complained of hesitancy of micturition. On examination he was pale, had an enlarged left supraclavicular node and bilateral cervical and axillary lymph node enlargement, and evidence of right hypoglossal palsy (Figures 1 and 2). Other cranial nerves were normal. He had normal power of all four limbs, ankle jerk was absent bilaterally, plantars were bilaterally flexor.

Investigations revealed anaemia, raised ESR, normal TSH, normal renal and liver function tests. Peripheral smear showed dimorphic anaemia. In view of the history, examination and lab findings, possibility of a malignancy was thought of. Taking into consideration the history of hesitancy of micturition, a per rectal examination was done which revealed grade 3 prostatomegaly with a hard nodular prostate. USG
abdomen showed enlarged prostate with significant residual urine. Serum PSA level was 4340 ng/ml. Hence a provisional diagnosis of Prostate malignancy presenting as unilateral hypoglossal nerve palsy was made. A prostate biopsy was done which confirmed malignancy (Figure 3). A bone scan was done which showed increased uptake at the skull base (Figure 4) and in all bones except right tibia. The final diagnosis made was carcinoma prostate with bony metastasis to the base of skull, presenting as unilateral hypoglossal nerve palsy.

Discussion

Unilateral hypoglossal nerve palsy has been reported in association with myriad causes including metastatic diseases at skull base, infections like IMN, aneurysms, trauma, autoimmune diseases and post surgically. The first case report of unilateral hypoglossal nerve palsy as the presenting feature of carcinoma prostate was described by Hemmings in The British Journal of Oromaxillofacial Surgery. The case report by Zreik Abdulla et al describing atrophy of the tongue as the presenting feature of metastatic prostate cancer is the second similar case reported. To the best of our knowledge, this is the third similar case being reported.

References

4. R Fernandes; Metastatic disease causing unilateral isolated hypoglossal nerve palsy. BMJ Case Reports 2010;doi:10.1136/bcr.05.2010.2998