Paraneoplastic Anti-Hu Neuronopathy Secondary to a Myxoid Chondrosarcoma in the Head and Neck Region

Introduction

It is rare for paraneoplastic syndromes to occur in patients with head and neck cancer, especially those involving the nervous system. In the current report, we describe a patient who developed a sensorimotor neuronopathy secondary to Anti-Hu antibodies produced by a myxoid chondrosarcoma arising in the left supraclavicular region.

Case Report

A 40 year-old gentleman presented to the otolaryngology office for evaluation of a left supraclavicular mass. Upon review of his history, it was found that the patient had noticed numbness of his arms, legs and trunk, which had developed 2-3 weeks previously. On physical examination the patient had no reflexes, tonic pupils, and orthostatic hypotension. Workup revealed that the patient had a sensorimotor polyneuropathy. He tested positive for serum anti-Hu antibodies. The patient underwent a left neck dissection including resection of the supraclavicular mass, and he was found to have a myxoid chondrosarcoma with metastases to several cervical lymph nodes. The tumor stained diffusely with anti-Hu antibodies. Since surgery, the patient has received intravenous immunoglobulin and Tacrolimus with slow progression of his neurologic disturbance.

Discussion

Anti-Hu neuronopathy has been described as a paraneoplastic syndrome in one case of head and neck cancer, and it has only been reported in association with three sarcomatous lesions. Our case represents the first report of anti-Hu neuronopathy occurring in a sarcomatous lesion primary to the head and neck.

References


Figure 1. CT scan of supraclavicular mass at presentation

Figure 2. Mesenchymal chondrosarcoma. Cellular proliferation with associated fibromyxoid stroma with solid, trabecular, single cell filing growth patterns. (Hematoxylin and eosin; 10x).

Figure 3. Mesenchymal chondrosarcoma. Neoplastic cells have an epithelioid morphology composed of round nuclei with vesicular chromatin, prominent nucleoli and indistinct to prominent eosinophilic cytoplasm. Some of the cells have a plasmacytoid or rhabdoid appearance. (Hematoxylin and eosin; 40x).

Figure 4. Mesenchymal chondrosarcoma. Mitotic figures are readily identifiable including atypical mitoses. (Hematoxylin and eosin; 40x).

Figure 5. Mesenchymal chondrosarcoma. Neoplastic cells are diffusely immunoreactive for vimentin. (40x).