A rare case of Paraneoplastic Autoimmune Encephalitis in a Hispanic male with Gastric Adenocarcinoma.

Percy M. Thomas
The University of Texas Rio Grande Valley

Gloria P. Rodriguez-Gomez
The University of Texas Rio Grande Valley

Jose Rivera
Doctors Hospital at Renaissance

Brandon Cantazaro
The University of Texas Rio Grande Valley

A rare case of Paraneoplastic Autoimmune Encephalitis in a Hispanic male with Gastric Adenocarcinoma.

Percy Thomas M.D[1], Gloria P. Rodriguez-Gomez M.D[1], Jose Rivera M.D[2], Brandon Cantazaro M.D[1]

1. Internal Medicine Department. University of Texas Rio Grande Valley
2. Critical Care Unit- Doctors Hospital at Renaissance

Background: Paraneoplastic syndromes (PNS) with Gastric cancer is a rare occurrence with very few reported cases, literature review showed that only four prior cases have been reported of patients with gastric adenocarcinoma that developed PNS, the high-risk phenotypes described in these cases were paraneoplastic limbic encephalitis; opsoclonus-myoclonus; and Lambert- Eaton myasthenic syndrome. Our patient with gastric adenocarcinoma on chemotherapy presented with a sudden onset of altered mental status, a series of diagnostic tests concluded autoimmune encephalitis as the culprit. This article will increase awareness of autoimmune encephalitis as a paraneoplastic complication of Gastric adenocarcinoma.

Case Presentation: 40-year-old male patient with a recent diagnosis of poorly differentiated gastric adenocarcinoma, on 5- fluorouracil, folic acid, oxaliplatin and docetaxel (FLOT) chemotherapy presented to emergency room with an acute onset altered mental status, headaches, right eye pain and swelling. Clinical examination was significant for sluggish orientation, left lateral rectus muscle palsy, presence of occipital and supraclavicular lymphadenopathy. Vital signs were unremarkable. Initial laboratory investigation was unremarkable except for leukocytosis 27000/mm^3. MRI of the brain revealed leptomeningeal enhancement and cavernous sinus thrombosis. Patient was admitted to the intensive care unit and treatment commenced for cavernous sinus thrombosis with anticoagulation and antibiotics. However, the CSF analysis demonstrated elevated protein 109 mg/dl and otherwise unremarkable findings with WBC 6/uL glucose 64 mg/dl. Due to high suspicion for autoimmune encephalitis based on lumbar puncture results, further analysis of CSF was sent which showed presence of autoimmune antibodies, and the patient was also started on steroid therapy. On the third day of hospitalization, the patient developed an intracranial bleed and passed away.

Conclusion: Paraneoplastic autoimmune encephalitis has an incidence of <1 % in gastric adenocarcinoma. Early suspicion and investigation for autoimmune encephalitis in encephalopathic patients who have solid tumors, would help in guiding the best modality of treatment. Generally speaking, treatment includes immunotherapy with steroids or removal of antigens by plasma exchange. Even after treatment the mortality rate in patients with PNS is very high. It is therefore important to suspect and recognize these early, in order to determine the best intervention to reduce mortality.