Unraveling first episode mania after colon cancer resection: A case report on Autoimmune Encephalitis

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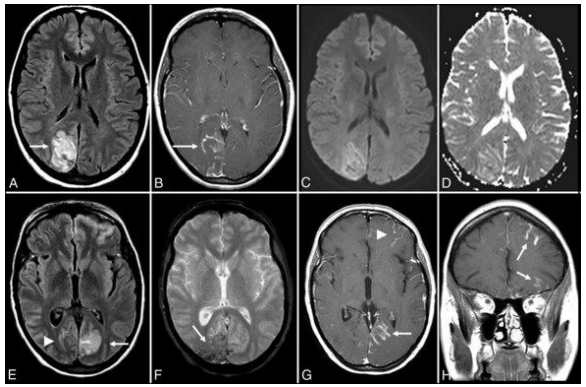
Learning Objectives

1. Understand associated neuropsychiatric symptoms of autoimmune encephalitis
2. Demonstrate a connection between colon cancer and autoimmune encephalitis
3. Recommended workup for initial presentation of mania in older adults

Background

There have been case reports of first episode mania and psychosis in patients with colon cancer[3,4]. In these cases, autoimmune encephalitis was diagnosed. Autoimmune encephalitis is also associated with many other disorders, and has been detected in patients with Alzheimer's disease, schizophrenia, bipolar disorder, and depression, and thus should be ruled out while working up these first episodes[1]. Conventional workup including MRI, EEG, and CSF studies should be conducted when autoimmune encephalitis is suspected.



Case

The patient was a 62-year-old male who has a past medical history of hyperlipidemia, mitral valve repair, and colon cancer diagnosed in June 2022. A polyp was found, and the patient underwent surgical intervention to remove the polyp in early August 2022. Two weeks later, the patient began displaying changes in his behavior as noted by his wife. At home, the patient was experiencing behavioral changes such as labile mood, disorganization, grandiosity, engaging in risky behaviors, paranoia, and insomnia. Additionally, the patient had visual hallucinations of birds and angels. He had no past psychiatric history. The patient has no inpatient admissions, nor outpatient care, as well as no history of substance abuse. Patient was medically admitted to rule out causes of acute behavioral change. Patient was started on Zyprexa 5mg and throughout his stay required titration to 15mg daily. The neurology team was consulted as well, who recommended MRI, EEG, and additional lab work. LP was also recommended. MRI showed multiple patchy confluent nonspecific abnormal white matter foci of T2/FLAIR prolongation statistically favoring microvascular disease. EEG showed mild diffuse/multifocal cerebral dysfunction, not specific as to etiology. LP was remarkable for elevated protein, with borderline elevated nucleated cells of 5 per dL, with lymphocyte predominance (81%), and 200 RBCs per uL. Infectious workup was unrevealing. Given objective findings and high clinical suspicion for autoimmune encephalitis, patient was empirically started on PLEX treatment. With initiation of PLEX, patient symptoms began to improve to the point where he was able to be safely discharged with plan to follow up with outpatient psychiatry. Patient received 5 doses of PLEX inpatient.

Discussion

Standard treatments such as PLEX can be considered a life-saving treatment, leads to symptom remission and safe discharge back to the community[2]. Psychiatric medications can be used to help target symptoms; however, PLEX is the standard treatment in cases of mania and psychosis caused by autoimmune encephalitis. Many studies show that symptoms will improve over 18 months to two years after initiation of treatment.

Conclusion

In older patients presenting with first episode mania or psychosis, autoimmune encephalitis should be ruled out as a potential cause. Thorough histories should be conducted, including exploring recent medical conditions and procedures.

References

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