



Psychiatric Sequelae of Viral Encephalitis

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Encephalitis is an inflammatory condition of the brain due to either an infection, which is usually with a virus, or an autoimmune process. In its acute stage, it is a neurological emergency that can cause death or disability, if not managed appropriately. Viral encephalitis can be the primary presentation of certain viruses or may occur as rare complications of common infections [1]. Viruses that may cause encephalitis include Herpes simplex virus 1 and 2, Cytomegalovirus, Varicella-zoster virus, Epstein-Barr virus.

Dengue virus, Lymphocytic choriomeningitis virus, Enterovirus, Mumps, Measles, Nipah virus, Influenza virus, and Japanese encephalitis virus [1,2]. It presents in an acute febrile state, with an altered level of consciousness, where the patient may appear confused, lethargic, or comatose. While there are definite signs of focal or diffuse neurologic deficits in the patients, they are oftentimes accompanied by frank psychotic states as well, with symptoms such as hallucinations, paranoia, agitation, and behavioral disturbances [3].

While cases of infectious encephalitis (65%) are more common than autoimmune encephalitis (30%), the literature purports that autoimmune encephalitis is more likely than viral encephalitis to have psychiatric symptoms at presentation. However, that does not imply an absence of psychiatric symptoms in the latter, particularly in cases where the infection involves the limbic region of the brain, a condition commonly termed limbic encephalitis. Due to this nature of presentation, as high as 80% of cases of encephalitis present to psychiatrists and other mental health professionals and have to be referred to neurologists [3,4]. Some

of the common psychiatric symptoms encountered at diagnosis include hallucinations, paranoia, mood disturbances, anxiety, aggression, irritability, and sleep disturbances [2,4].

Unlike in acute stages of presentation, the literature does not suggest significant differences in psychiatric symptoms as sequelae of viral encephalitis. The commonly encountered psychiatric sequelae of viral encephalitis include anxiety disorders (most common psychiatric sequelae), depressive disorders, psychotic disorders, affective disorders, post-traumatic stress disorder, behavioral or personality changes, suicidality, and suicide [4-7].

The high rates of psychiatric sequelae in such cases suggest the presence of multifactorial models of causation; most of which are still hypotheses under study. They are the result of both structural as well as functional brain alterations occurring secondary to viral infiltration, immune system reactions, or even iatrogenic reasons such as adverse effects of medications, or delirium following prolonged stay in the intensive care units. Psychiatric sequelae are also more likely to occur in those who have had past episodes of similar illnesses or poor mechanisms of coping and resilience. These sequelae are mostly managed with the help of psychotropics such as low-dose antipsychotics, antidepressants, and benzodiazepines, and show quick resolution of symptoms, after which the medications are stopped or tapered as per the response and need [4].

It is therefore not only necessary for psychiatrists to be aware of encephalitis in its various stages to prevent misdiagnosis and

complications in such patients, but they also need to be involved in the long-term treatment of such patients for improved recovery and rehabilitation. The need to adopt Consultation-Liaison Psychiatry is more than ever today, as treatment is no longer confined to just correction of the underlying aberrance or pathology, and the approach is overall remediation and improved quality of life.

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Conflicts of Interest

The authors declare no conflict of interest.

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