

## A fatal case of bipolar disorder and comorbid hepatitis C

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## Dear Editor,

Bipolar disorder is associated with an increased risk of substance use disorders and hepatitis C virus (HCV) infection<sup>1</sup>. The prevalence of HCV in bipolar patients is 5 to 13-fold higher than in the general population, presenting a major clinical and therapeutic challenge<sup>2</sup>. We report a case of a patient with bipolar disorder, a history of heroin addiction, and HCV related cirrhosis with fatal outcome.

## Case

Mr. A was a 44-year-old married white male, an artist, who was diagnosed with bipolar disorder in his late adolescence. He had recurrent manic or mixed psychotic episodes, effectively treated with antipsychotics and mood stabilizers. During a ten-year period of intravenous heroin misuse and dependency, he contracted HCV and subsequently developed liver cirrhosis. Induction of psychotic exacerbation hindered specific HCV infection treatment, which continued with hepatoprotectors and diuretics with poor adherence. The patient's timeline is presented in Figure 1.

The last psychiatric admission of Mr. A was at the age of 44. He presented with insomnia, elevated mood, megalomania, delusions, dysphoria, and lack of insight. Anaemia, thrombocytopenia, hypoalbuminemia, ascites and elevated transaminases were present. Zuclopenthixol resolved the psychiatric symptoms and the patient was referred to the hepatology department. A follow-up after one year was scheduled. The patient's wife reported that he had died. He had been in stable mood following discharge and discontinued the psychiatric treatment. The improvement in the mental state improved the compliance with the somatic treatment and regimen, which led

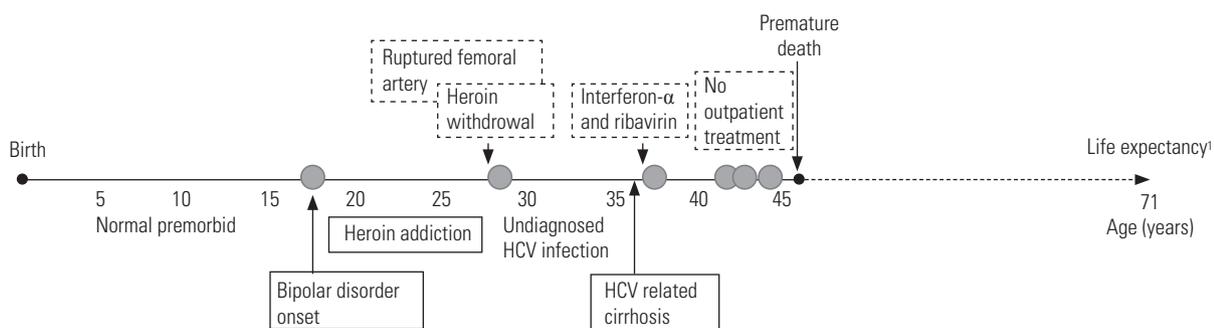
to temporary stabilization of the somatic state. However, his somatic condition deteriorated and he died from liver failure 3 months prior to the scheduled follow-up at the age of 45.

## Discussion

Individuals with severe mental illness are estimated to die approximately 25 years earlier than the general population and up to 60% of the premature deaths are due to general medical conditions<sup>3</sup>. Chronic HCV infection is a major concern, with an estimated infection rate up to 10–23.3% in bipolar patients as compared to 1.8% in the general population<sup>4</sup>. The risk of liver cirrhosis is between 15 and 30% within 20 years<sup>5</sup> but risky social environment, high-risk behaviors, and non-compliance can aggravate the condition in bipolar patients<sup>2</sup>.

New and highly effective therapies for chronic HCV infection are present, however access to treatment remains limited and psychiatric patients still suffer stigmatization<sup>6,7</sup>. Mental disorders were previously seen as contraindications against the use of interferon alfa and ribavirin in patients with chronic hepatitis C, as cases of mania and psychosis induced after initiation of treatment or upon withdrawal have been reported<sup>8,9</sup>. Current guidelines state that all HCV-infected patients should receive treatment, with patients with life-threatening conditions not expected to survive beyond 1 year being the only exclusion<sup>7</sup>.

The case highlights the importance of an integrated model for clinical management of patients with comorbid HCV infection and bipolar disorder. An interdisciplinary approach and education of the patient are required in order to ensure the adequate treatment and compliance and prevent fatal outcomes<sup>10</sup>.



## Legend:

● Manic or mixed psychotic episodes    ▭ Precipitating cause    ▭ Diagnosed disorders

<sup>1</sup> Life expectancy for the year of birth of the patient, from <https://data.worldbank.org/indicator/SP.DYN.LE00.IN>

Figure 1. History of the patient.



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