

Will Aripiprazole Intramuscular Injection Help in a Patient With Delusional Disorder and Advanced HIV Disease? A Case Report

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INTRODUCTION

We aim to describe a case of delusional disorder in a patient with a background of human immunodeficiency virus (HIV) & hepatitis B Virus (HBV) co-infection who improved with the combination therapy of short-acting intramuscular (SAIM) and long-acting intramuscular (LAIM) Aripiprazole as well as initiation of antiretroviral therapy (ART) for both HIV and HBV .

A female in her 50's with underlying untreated HIV and HBV was formally admitted to an inpatient psychiatric ward. She experienced 10 years of persecutory delusions with abrupt onset, characterised by the belief that her information was hacked as well as being served with poisonous food and medications intended to harm her. This resulted in severe mistrust of healthcare professionals (HCPs), unilaterally stopping ART and significant weight loss. Her physical health deteriorated until she was unable to work, triggering a major depressive episode. There were no other features of psychosis or mania.

METHOD

A case study

RESULTS

- Oral medications were initially declined due to severe mistrust of HCPs and paranoid persecutory delusions.
- Patient was treated with SAIM Aripiprazole 9.75mg once daily for seven days.
- Became subjectively and objectively less paranoid with regards to food, enabling her to start eating and accept oral medications.
- Further establishment of rapport with the treating team was possible with psychosocial treatment, including outdoor and art activities.
- Maintenance treatment with LAIM aripiprazole and ART was initiated following shared decision making.

Differential Diagnoses

Delusional disorder	Important differentials
<p><u>Supporting:</u></p> <ul style="list-style-type: none"> -Abrupt onset & well systematised paranoid persecutory delusions - Able to continue working for 6 years following onset of symptoms -Whilst symptoms have improved, patient remains to have residual paranoia but is now able to carry out daily activities of living. 	<p>Organic psychosis</p> <p><u>Supporting:</u></p> <ul style="list-style-type: none"> -HIV crosses the blood brain barrier early in infection -At least 5 years of untreated disease <p><u>Against:</u></p> <ul style="list-style-type: none"> -HIV specialists lead investigations to rule out underlying HIV associated illness including CT head, lumbar puncture, chest x-ray and blood investigations. All were unremarkable <p>Schizophrenia</p> <p><u>Supporting</u></p> <ul style="list-style-type: none"> - husband described cyclical chaotic behaviour - Patient presented as withdrawn & irritable <p><u>Against:</u></p> <ul style="list-style-type: none"> -No other psychotic symptoms other than delusions <p>Depression with psychotic symptoms</p> <p><u>Supporting</u></p> <ul style="list-style-type: none"> -Multiple tragic life events including death of two children, death of sibling and HIV diagnosis -PHQ9 21 during admission <p><u>Against:</u></p> <ul style="list-style-type: none"> -Depressive symptoms started after onset of paranoid persecutory delusions

Table showing progress through outcomes measured

Outcome measured	On admission	2 months post discharge
Body Mass Index	14.9	20.4
HIV Viral Load (copies/ml)	316,228	162
CD4 Count (cells/mm ³)	230	400
Hep B Viral Load (copies/ml)	5,888	95
PHQ-9 Score	21	3
Social	Unable to work due to decline in physical health	Full time employment

DISCUSSION

- Organic psychosis was ruled out: absence of features of AIDS neurological deficit, laboratory and radiological findings.
- Although antipsychotics have been used for the treatment of delusional disorder, there is no antipsychotics licensed for the treatment of delusional disorder in the United Kingdom¹.
- In the absence of full physical health assessment due to persecutory delusion toward HCPs and presence of significant co-morbidity, Aripiprazole was chosen for EB based on its favourable cardiovascular safety profile².
- Special considerations should be taken when initiating antipsychotic treatment in immunosuppressed patients, particularly when neutropenia has been reported with Aripiprazole although it is uncommon³. Additional monitoring including monthly blood tests for first 3 months was planned in the psychiatry outpatient clinic to mitigate this risk.

CONCLUSION

This case required a multiple MDT collaborative approach involving the mental health and physical health physicians, pharmacist, and nursing team. This is essential in patients with complex physical and mental health presentations. In addition, Intensive psychosocial treatment in the form of outdoor activities and art therapy was effective in building rapport with a patient suffering with severe paranoid persecutory delusions.

Although multiple Aripiprazole SAIM and LAIM injections have been safely administered in acute stabilisation of delusional disorder, further evaluation using long term trials is essential to establish its effectiveness.

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