INTRODUCTION

Opioid and cocaine use have been rarely associated with an unusual amnestic syndrome characterized by acute anterograde amnesia, in addition to orientation deficits, attention, and executive dysfunction. Furthermore, such cases included acute, complete, and bilateral hippocampal lesions on magnetic resonance imaging (MRI). However, given the rarity of the presentation, general understanding and identification of the syndrome is lacking.

CASE DESCRIPTION

A 51-year-old man with a past medical history significant for polysubstance abuse, seizure disorder, noncompliant with anti-epileptic treatment, and chronic back pain presented with altered mental status.

- Initially, he was obtunded and minimally responsive to tactile stimuli.

VITALS and INITIAL LABS

<table>
<thead>
<tr>
<th>Temp</th>
<th>HR</th>
<th>RR</th>
<th>BP</th>
<th>O₂ sat</th>
<th>Na⁺</th>
<th>Cl⁻</th>
<th>K⁺</th>
<th>CO₂</th>
<th>Gluc</th>
<th>Hb</th>
<th>WBC</th>
<th>Pt</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.7F</td>
<td>59</td>
<td>10</td>
<td>130/95</td>
<td>98% RA</td>
<td>137</td>
<td>97</td>
<td>4.2</td>
<td>28</td>
<td>133</td>
<td>14.3</td>
<td>22.4</td>
<td>98%</td>
</tr>
</tbody>
</table>

- Given naloxone for concern of narcotic overdose → less lethargic and reactive to tactile stimuli and oriented to self without any apparent gross motor deficits.

- After admission, the patient had another isolated temperature of 100.7 F.

- He also exhibited intermittent agitation and restlessness, and poor safety awareness with great difficulty in redirecting.

- Given encephalopathy, fever, and leukocytosis, patient underwent additional investigations.

HOSPITAL COURSE

- Over the course of the next several days, the patient’s symptoms of agitation were managed with lorazepam, quetiapine, and clonidine.

- However, he continued to have short term memory impairment with deficits in concentration and attention.

CONCLUSION

Multidisciplinary conclusion was that the patient suffered from polysubstance induced amnesia. Post discharge, patient will need close supervision for cognitive deficits and neuropsychology follow up for further neuropsychiatric testing.

DISCUSSION

Amnestic syndrome associated with polysubstance use is an unusual entity and diagnosis of exclusion. Extensive infectious, metabolic and neurological work-up needs to be pursued to rule out potential etiologies of amnestic syndrome. Laboratory and radiological evaluation were negative, however, few documented cases have identified bilateral hippocampal hyper-intensities on diffusion-weighted MRI. Clinicians should be aware of this syndrome to make a diagnosis in a timely manner and facilitate further management with psychiatry and neurology.

REFERENCES