Teaching Neuroimages: Cytotoxic Lesion of Corpus Callosum Secondary to *Influenza A*

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A 42-year-old man presented with respiratory symptoms followed by ptosis, ageusia, dysarthria and left-hand weakness. MRI showed a lesion within the splenium of corpus callosum (Figure 1). Vascular and toxic-metabolic work-up was unremarkable. Nasopharyngeal swab revealed Influenza-A positivity. Symptoms fully resolved after oseltamivir treatment.

Cytotoxic lesion of corpus callosum (CLOCC) can have several etiologies\(^1\). The dysfunction of callosal neurons and microglia is due to cell-cytokine interaction, which provokes increased cytokines and extracellular glutamate\(^1\). Patient’s symptoms may be explained by viral invasion of the nervous system or indirect viral effects via humoral factors rather than directly by the CLOCC\(^2,3\).

Appendix 1: Authors

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam I. Hooshmand, DO</td>
<td>Medical College of Wisconsin</td>
<td>patient care, case report concept, design preparation of the first draft, and revision of manuscript content.</td>
</tr>
<tr>
<td>Kevin Chow, MD</td>
<td>Medical College of Wisconsin</td>
<td>patient care and revision of the manuscript content.</td>
</tr>
<tr>
<td>Ahmed Z Obeidat, MD PhD</td>
<td>Medical College of Wisconsin</td>
<td>case report concept, critical revision of the manuscript content and overall supervision.</td>
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References:


Figure: Brain MRI with and without contrast

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