Infliximab to Treat Severe Paradoxical Reaction in HIV-Negative Tuberculous Meningoencephalitis

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Tuberculous meningoencephalitis (TBM) was diagnosed in a 33 years old HIV-negative patient. CSF culture was positive for drug-susceptible *mycobacterium tuberculosis* and anti-TB therapy associated with steroids were started. After 3 months, brain MRI showed a worsening of the basal meningeal enhancement while the patient complained of new headaches. CSF analysis demonstrated pleocytosis (100 cells/mm$^3$), with an increased protein count (2580 mg/dL); CSF culture and viral panel were negative. The worsening was considered due to immune reconstitution inflammatory syndrome (IRIS) and Infliximab was started leading to dramatic clinical and imaging improvement (Figure 1).

**References**


**Figure title**

Sequential brain MRI and treatments for severe paradoxical reaction in tuberculous meningoencephalitis

**Legends**

Longitudinal follow-up on brain MRI (axial reconstruction of contrast-enhanced 3D GE T1-weighted). Basilar meningitis clear-cut worsening with dramatic improvement following infliximab treatment. At 3 months, we notice a proximal vascular involvement with a spread to perimesencephalic and ambient cisterns.

I; isoniazid, R; Rifampicin, P; Pyrazinamide, E; Ethambutol, MP; Methylprednisolone
<table>
<thead>
<tr>
<th>TB therapy</th>
<th>I/R/E/P</th>
<th>I/R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prednisone (mg/d)</td>
<td>120 60 30 15 10 7.5</td>
<td>10 7.5 5</td>
</tr>
<tr>
<td>MP pulse</td>
<td>↑↑↑</td>
<td>↑</td>
</tr>
<tr>
<td>Infliximab (5 mg/kg)</td>
<td>↑↑↑</td>
<td>↑</td>
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