Systematic Pubmed search about hypogammaglobulinemia as an outcome of Rituximab treatment in NMOSD patients.

Selection of the most sensitive and specific search query (with the most relevant items as a result).

(((NMO OR NMOSD OR Devic OR "Devic's neuromyelitis optica" OR "neuromyelitis optica") AND rituximab) AND (hypogammaglob* OR immunoglob* OR "IgG" OR infect*))

58 items found

Exclusion criteria:
1. Title
2. Abstract
3. Full text (search of the following key terms and selective reading):
   - Adverse effects
   - Hypogammaglobulinemia
   - IgG

8 items found

<table>
<thead>
<tr>
<th>Reference</th>
<th>Results</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim S-H, Jeong IH, Hyun J-W, et al. Treatment Outcomes With Rituximab in 100 Patients With Neuromyelitis Optica: Influence of FCGR3A Polymorphisms on the Therapeutic Response to Rituximab. JAMA Neurol. 2015;72(9):989-995.</td>
<td>Low IgM, IgG, and IgA levels occurred in 53%, 29%, and 10% of the treated patients respectively. The infection rates were not increased in patients with low IgG or IgM levels.</td>
<td>41 patients treated for more than 5 years.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Summary</td>
<td>Number of Patients</td>
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</tbody>
</table>

No significant change in IgM (p=0.06) or IgG (p=0.45) levels after RTX treatment.

Low Ig levels were detected in 2/10 patients, who experienced infectious adverse effects.

20% of patients developed infectious complications. One patient had fatal infectious adverse effect, during a hypogammaglobulinaemia period.