<table>
<thead>
<tr>
<th>Intervention</th>
<th>Rationale</th>
<th>Study Details</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folate, Betaine</td>
<td>Dietary methyl supplementation</td>
<td>Randomized double blinded placebocontrolled 73 individuals</td>
<td>No clinical improvement although parents reported improvement in children under 5 years old</td>
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<tr>
<td>Folinic Acid</td>
<td>Improve folate levels in CNS</td>
<td>Randomized double blinded placebocontrolled crossover trial 8 individuals</td>
<td>Increased 5-MTHF levels, no clinical change</td>
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<tr>
<td>Creatine</td>
<td>DNA methylation</td>
<td>Randomized double blinded placebocontrolled crossover trial 18 individuals in stage III or IV</td>
<td>11% increase in DNA methylation, no clinical change</td>
</tr>
<tr>
<td>Melatonin</td>
<td>Improve sleep disturbances</td>
<td>Open label 10 individuals</td>
<td>Increased total sleep time and efficiency in subjects with worst baselines</td>
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<tr>
<td>L-carnitine</td>
<td>Improve Carnitine deficiency</td>
<td>Randomized double blinded placebocontrolled crossover trial 35 individuals</td>
<td>Improvement in hand apraxia, some measures of well-being in subgroup</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>Improve respiratory function</td>
<td>Randomized double blind placebocontrolled crossover trial 25 individuals</td>
<td>Modification of some breathing issues, more rapid decline in 40% on drug</td>
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<tr>
<td>Lamotrigine</td>
<td>Seizure control and dyspraxia</td>
<td>Open pilot study 12 individuals</td>
<td>Well tolerated, better seizure control in 2/3, better behavior in 4/12</td>
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<tr>
<td>Levetiracetam</td>
<td>Seizure control</td>
<td>Open label 8 individuals</td>
<td>Reduced seizure frequency and improved quality of life</td>
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</table>