**iCAHE JC Critical Appraisal Summary**

**Journal Club Details**

<table>
<thead>
<tr>
<th>Journal Club location</th>
<th>Modbury Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>JC Facilitator</td>
<td>J’aime Newland &amp; Alyce Berry</td>
</tr>
<tr>
<td>JC Discipline</td>
<td>Occupational Therapy</td>
</tr>
</tbody>
</table>

**Question**

N/A

**Review Question/PICO/PACO**

P: Clients with high tone in their upper limbs post stroke
I: Botillium Toxn + therapy.
C: Normal therapy with no botox
O: functional upper limb usage/ ROM

**Article/Paper**


*Please note: due to copyright regulations CAHE is unable to supply a copy of the critically appraised paper/article. If you are an employee of the South Australian government you can obtain a copy of articles from the DOHSA librarian.*

**Article Methodology:** Cohort Study
<table>
<thead>
<tr>
<th>Ques No.</th>
<th>Yes</th>
<th>Can’t Tell</th>
<th>No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>✓</td>
<td></td>
<td></td>
<td><strong>Did the study address a clearly focused issue?</strong>&lt;br&gt;The purpose of the current study was to investigate whether a combined BoNTA and MD program contributes to the functional recovery of the upper and lower limbs in stroke patients with spasticity</td>
</tr>
<tr>
<td>2</td>
<td>✓</td>
<td></td>
<td></td>
<td><strong>Did the authors use an appropriate method to answer their question?</strong>&lt;br&gt;As the aim of the current study is to determine whether there was an effect on function (rather than effectiveness of BoNTA &amp; MD on function) a cohort study is appropriate. Additionally, records were viewed retrospectively, which suits the cohort study design. However, a control or comparison group would have reduced many biases, and should have been considered.</td>
</tr>
<tr>
<td>3</td>
<td>✓</td>
<td></td>
<td></td>
<td><strong>Is it worth continuing?</strong>&lt;br&gt;YES</td>
</tr>
<tr>
<td>4</td>
<td>✓</td>
<td></td>
<td></td>
<td><strong>Was the cohort recruited in an acceptable way?</strong>&lt;br&gt;Patients who received BoNT-A injections and inpatient rehabilitation at Kikyogahara Hospital from April 2012 to April 2015 and who met the criteria below were included in this study.</td>
</tr>
<tr>
<td>5</td>
<td>✓</td>
<td></td>
<td></td>
<td><strong>Was the outcome accurately measured to minimize bias?</strong>&lt;br&gt;- Modified Ashworth Scale (MAS), assessed the shoulder, elbow, wrist, finger, knee and ankles.&lt;br&gt;- Fugl-Meyer Assessment (FMA), used 33 items (maximum score of 66) pertaining to upper limb function, including shoulder, elbow, forearm, wrist, and hand&lt;br&gt;- Comfortable and maximum gait velocities of the 10 MeterWalk Test (10MWT) were also measured&lt;br&gt;- Functional Reach Test (FRT), conducted this assessment because there may be changes in balance abilities due to BoNT-A injections in both the upper and lower limbs.&lt;br&gt;- The Timed Up and Go (TUG) test, patients were required to stand up from a chair with armrests, walk 3 meters, turn around, return to the chair, and sit down as quickly as possible</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 6 | ✓ | Have the authors identified all important confounding factors?  
No  
Have they taken account of the confounding factors in the design and/or analysis?  
Confounding factors were not considered or acknowledged. Authors did acknowledge that a control group would minimize bias. |
| 7 | ✓ | Was the follow up of subjects complete enough?  
Follow-up was conducted at 3-months post-treatment. Considering the life of Botox injections, this is an appropriate timeline. |
| 8 | | What are the results of this study?  
At the time of discharge, all of the evaluated items showed a statistically significant improvement \((p < 0.05)\). Only the Functional Reach Test (FRT) showed a statistically significant improvement at 3 months \((p < 0.05)\). In subgroup analyses, the slowest walking speed group showed a significantly greater change ratio of the 10 Meter Walk Test relative to the other groups, from the time of admission to discharge. This group showed a greater FRT change ratio than the other groups from the time of admission to the 3-month follow-up. Inpatient combined therapy of simultaneous injections of BoNT-A to the upper and lower limbs and MD may improve motor function. |
| 9 | | How precise are the results?  
P values are provided but confidence intervals are not provided or discussed. |
| 10 | | Do you believe the results?  
Can the results be applied to the local population?  
CONTEXT ASSESSMENT (please refer to attached document)  
- Infrastructure  
- Available workforce (? Need for substitute workforce?)  
- Patient characteristics  
- Training and upskilling, accreditation, recognition  
- Ready access to information sources  
- Legislative, financial & systems support  
- Health service system, referral processes and decision-makers  
- Communication  
- Best ways of presenting information to different end-users  
- Availability of relevant equipment  
- Cultural acceptability of recommendations  
- Others  
Were all important outcomes considered?  
Are the benefits worth the harms and costs?  
Journal Club to discuss |
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>What do the study findings mean to practice (i.e. clinical practice, systems or processes)?</td>
</tr>
</tbody>
</table>
| 15 | What are your next steps?  
**ADOPT, CONTEXTUALISE, ADAPT**  
And then (e.g. evaluate clinical practice against evidence-based recommendations; organise the next four journal club meetings around this topic to build the evidence base; organize training for staff, etc.) |
| 16 | What is required to implement these next steps? |