

## QUESTION

### Should prevention/lifestyle vs. none or medication be used for patients with RLS symptoms with Friedreich ataxia?

|                       |  |
|-----------------------|--|
| <b>POPULATION:</b>    | patients with RLS symptoms with Friedreich ataxia  |
| <b>INTERVENTION:</b>  | prevention/lifestyle   |
| <b>COMPARISON:</b>    | none or medication   |
| <b>MAIN OUTCOMES:</b> | Impact on sleep quality/arousals; Impact on sleep quantity/ sleep benefit; Impact on behaviour, cognition, mood; Degree of pain versus discomfort; |

## ASSESSMENT

### Problem

Is the problem a priority?

| JUDGEMENT   | RESEARCH EVIDENCE   | ADDITIONAL CONSIDERATIONS   |
|---|---|---|
| <ul style="list-style-type: none"> <li><input type="radio"/> No</li> <li><input type="radio"/> Probably no</li> <li><input checked="" type="radio"/> Probably yes</li> <li><input type="radio"/> Yes</li> <li><input type="radio"/> Varies</li> <li><input type="radio"/> Don't know</li> </ul> | <p>Data from the FA Clinical Outcome Measures (FA-COMS) registry (Lynch, 2017) found:</p> <p>44.8% (312/696) of adults and 34.9% (110/315) of children reported restless legs; 75.0% (522/696) of adults and 55.6% (175/315) of children reported leg spasms. By comparison, restless legs affect between 4% and 14% of the general population (Ohayon et al, 2012).</p> <p>For individuals who reported sleep disturbance:</p> <p>Restless legs were present in 46.3% (229/495) of adults and 32.9% (53/161) of children, and leg cramps in 58.6% (290/495) adults and 44.7% (72/161) of children (Lynch, 2017).</p> | <p>The Friedreich's ataxia Clinical Management Guideline Patient and Parent Advisory Panel were interviewed on the consequences, urgency and priority of restless legs.</p> <p>2/7 indicated that the problem was serious, 4/7 indicated probably serious, 1/7 indicated probably not serious.</p> <p>2/7 indicated that the problem was urgent, 4/7 indicated probably urgent, 1/7 indicated probably not urgent.</p> <p>3/7 indicated that the problem was a priority, 3/7 indicated probably a priority, 1/7 indicated probably not a priority. (Aug 2020)</p> |

### Desirable Effects

How substantial are the desirable anticipated effects?

| JUDGEMENT  | RESEARCH EVIDENCE  | ADDITIONAL CONSIDERATIONS |
|--|--|---------------------------|
| <ul style="list-style-type: none"> <li><input type="radio"/> Trivial</li> <li><input type="radio"/> Small</li> <li><input type="radio"/> Moderate</li> <li><input type="radio"/> Large</li> <li><input type="radio"/> Varies</li> <li><input checked="" type="radio"/> Don't know</li> </ul> | <p>A search of four databases (CENTRAL, MEDLINE, EMBASE, CINAHL) identified no randomized, non-randomized controlled, cohort and case studies published from 2014 through to 30 October. No further published evidence meeting the search criteria was identified in the Consensus Clinical Management Guidelines for Friedreich's ataxia, 2014.</p> |                           |

### Undesirable Effects

How substantial are the undesirable anticipated effects?

| JUDGEMENT   | RESEARCH EVIDENCE  | ADDITIONAL CONSIDERATIONS |
|---|--|---------------------------|
| <ul style="list-style-type: none"> <li>○ Large</li> <li>○ Moderate</li> <li>○ Small</li> <li>○ Trivial</li> <li>○ Varies</li> <li>● Don't know</li> </ul> | <p>A search of four databases (CENTRAL, MEDLINE, EMBASE, CINAHL) identified no randomized, non-randomized controlled, cohort and case studies published from 2014 through to 30 October. No further published evidence meeting the search criteria was identified in the Consensus Clinical Management Guidelines for Friedreich's ataxia, 2014.</p> |                           |

## Certainty of evidence

What is the overall certainty of the evidence of effects?

| JUDGEMENT  | RESEARCH EVIDENCE             | ADDITIONAL CONSIDERATIONS |
|--|-------------------------------|---------------------------|
| <ul style="list-style-type: none"> <li>○ Very low</li> <li>○ Low</li> <li>○ Moderate</li> <li>○ High</li> <li>● No included studies</li> </ul> | <p>No published evidence.</p> |                           |

## Values

Is there important uncertainty about or variability in how much people value the main outcomes?

| JUDGEMENT  | RESEARCH EVIDENCE  | ADDITIONAL CONSIDERATIONS         |            |                                   |   |                        |   |  |                        |   |   |                        |   |  |
|--|--|-----------------------------------|------------|-----------------------------------|---|------------------------|---|--|------------------------|---|---|------------------------|---|--|
| <ul style="list-style-type: none"> <li>○ Important uncertainty or variability</li> <li>● Possibly important uncertainty or variability</li> <li>○ Probably no important uncertainty or variability</li> <li>○ No important uncertainty or variability</li> </ul> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Outcomes</th> <th style="width: 20%;">Importance</th> <th style="width: 30%;">Certainty of the evidence (GRADE)</th> </tr> </thead> <tbody> <tr> <td>Impact on sleep quality/arousals - not measured</td> <td>IMPORTANT<sup>a</sup></td> <td style="text-align: center;">-</td> </tr> <tr> <td>Impact on sleep quantity/ sleep benefit - not measured</td> <td>IMPORTANT<sup>a</sup></td> <td style="text-align: center;">-</td> </tr> <tr> <td>Impact on behaviour, cognition, mood - not measured</td> <td>IMPORTANT<sup>a</sup></td> <td style="text-align: center;">-</td> </tr> </tbody> </table> | Outcomes                          | Importance | Certainty of the evidence (GRADE) | Impact on sleep quality/arousals - not measured | IMPORTANT <sup>a</sup> | - | Impact on sleep quantity/ sleep benefit - not measured | IMPORTANT <sup>a</sup> | - | Impact on behaviour, cognition, mood - not measured | IMPORTANT <sup>a</sup> | - |  |
| Outcomes   | Importance   | Certainty of the evidence (GRADE) |            |                                   |   |                        |   |  |                        |   |   |                        |   |  |
| Impact on sleep quality/arousals - not measured  | IMPORTANT <sup>a</sup>   | -                                 |            |                                   |   |                        |   |  |                        |   |   |                        |   |  |
| Impact on sleep quantity/ sleep benefit - not measured   | IMPORTANT <sup>a</sup>   | -                                 |            |                                   |   |                        |   |  |                        |   |   |                        |   |  |
| Impact on behaviour, cognition, mood - not measured  | IMPORTANT <sup>a</sup>   | -                                 |            |                                   |   |                        |   |  |                        |   |   |                        |   |  |



|                       | JUDGEMENT                            |  |  |   |                         |        |                     |
|-----------------------|--------------------------------------|--|--|---|-------------------------|--------|---------------------|
| DESIRABLE EFFECTS     | Trivial                              | Small  | Moderate   | Large                                   |                         | Varies | Don't know          |
| UNDESIRABLE EFFECTS   | Large                                | Moderate   | Small  | Trivial                                 |                         | Varies | Don't know          |
| CERTAINTY OF EVIDENCE | Very low                             | Low  | Moderate   | High                                    |                         |        | No included studies |
| VALUES                | Important uncertainty or variability | <b>Possibly important uncertainty or variability</b> | Probably no important uncertainty or variability         | No important uncertainty or variability |                         |        |                     |
| BALANCE OF EFFECTS    | Favors the comparison                | Probably favors the comparison                       | Does not favor either the intervention or the comparison | Probably favors the intervention        | Favors the intervention | Varies | Don't know          |
| ACCEPTABILITY         | No                                   | Probably no  | <b>Probably yes</b>                                      | Yes                                     |                         | Varies | Don't know          |

## TYPE OF RECOMMENDATION

|   |  |   |   |   |
|---|--|---|---|---|
| Strong recommendation against the intervention<br>○ | Conditional recommendation against the intervention<br>○ | Conditional recommendation for either the intervention or the comparison<br>○ | <b>Conditional recommendation for the intervention</b><br>● | Strong recommendation for the intervention<br>○ |
|---|--|---|---|---|

## CONCLUSIONS

### Recommendation

We conditionally recommend the use of prevention strategies/lifestyle changes (such as reduction of alcohol and nicotine use) over no prevention strategies/lifestyle changes or medication in individuals with Friedreich ataxia with RLS.

### Justification

RLS is a significant problem affecting 44.8% of adults with FRDA. Lifestyle interventions such as a reduction of alcohol and nicotine especially in the evening may have an impact on RLS symptoms in general. Weighing up the balance between benefits, harms and costs, these measures appear to be acceptable. Regular physical activity, sleep hygiene, a regular time for going to bed, avoiding caffeine and the use of electronic devices in bed are likely to help RLS.

## Subgroup considerations

## Implementation considerations

Not relevant.

## Research priorities