

QUESTION

Should monitoring at least once per year vs. informal monitoring be used for non-ambulant individuals with Friedreich ataxia?

POPULATION:	non-ambulant individuals with Friedreich ataxia
INTERVENTION:	monitoring at least once per year
COMPARISON:	informal monitoring
MAIN OUTCOMES:	Independence in transfers; Pain; Independence in activities of daily living; Capacity to stand; Sitting balance; Quality of life;

ASSESSMENT

Problem

Is the problem a priority?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
<ul style="list-style-type: none"> <input type="radio"/> No <input type="radio"/> Probably no <input checked="" type="radio"/> Probably yes <input type="radio"/> Yes <input type="radio"/> Varies <input type="radio"/> Don't know 	<p>In a cohort of 111 individuals with FRDA, quality of life (QOL), as measured by the PedsQL 4.0 GCM, was significantly lower for those who used a mobility device as compared to those who did not require a mobility device. Of the 47 participants who reported they'd transitioned to a mobility device, 43 reported that this was a wheelchair, suggesting decreased QOL may be in part due to loss of ability to ambulate (Ejaz et al, 2018).</p> <p>In a separate study evaluating neurological disease progression in 54 individuals with FRDA, once individuals were non-ambulant, sitting balance continued to decline, as reflected by changes seen in the SARA sitting item (Pandolfo, 2020).</p> <p>Although not examined specifically in individuals with FRDA, a 2015 systematic review found that loss of balance and activities requiring dynamic stability (such as reaching and transfers) were associated with an increased risk of falls in non-ambulant adults (Rice et al, 2015).</p>	<p>The Friedreich's ataxia Clinical Management Guideline Patient and Parent Advisory Panel were interviewed on the consequences, urgency and priority of the topic.</p> <p>1/7 indicated non-ambulant mobility was not serious, 2/7 indicated probably serious, 4/7 indicated serious.</p> <p>3/7 indicated non-ambulant mobility was probably not urgent, 4/7 indicated urgent.</p> <p>2/7 indicated non-ambulant mobility was probably not a priority, 1/7 indicated probably a priority, 4/7 indicated priority. (Aug 2020).</p>

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
<ul style="list-style-type: none"> <input type="radio"/> Trivial <input type="radio"/> Small <input checked="" type="radio"/> Moderate <input type="radio"/> Large <input type="radio"/> Varies <input type="radio"/> Don't know 	<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 24 September 2020. No further published evidence meeting the search criteria was identified in the Consensus Clinical Management Guidelines for Friedreich's ataxia, 2014.</p>	<p>In clinical practice, annual monitoring with subsequent individualised management strategies for mobility decline (in particular, maintaining the ability to transfer independently), seating reviews or mobility changes advised at many clinic visits.</p> <p>The Ataxia UK Medical Guidelines also recommends regular follow-up by a physiotherapist to preserve mobility and provide advice on walking aids at the different stages of the condition for all progressive ataxias including individuals with FRDA. 'Regular'</p>

		physiotherapist follow-up is not defined in the Ataxia UK Medical Guidelines; however, the guidelines recommend 6-12 monthly reviews from a neurologist or specialist ataxia neurologist to monitor progression of the conditions and identify any new symptoms requiring treatment (de Silva et al, 2019).
--	--	---

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
<ul style="list-style-type: none"> <input type="radio"/> Large <input type="radio"/> Moderate <input type="radio"/> Small <input checked="" type="radio"/> Trivial <input type="radio"/> Varies <input type="radio"/> Don't know 	<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 24 September 2020. No further published evidence meeting the search criteria was identified in the Consensus Clinical Management Guidelines for Friedreich's ataxia, 2014.</p>	<p>There are no risks associated with regular monitoring (at least once per year) for individuals with FRDA. There may be a burden with attending face-to-face medical or physiotherapy appointments, especially if travel distances are large.</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"> <input checked="" type="radio"/> Very low <input type="radio"/> Low <input type="radio"/> Moderate <input type="radio"/> High <input type="radio"/> No included studies 	<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"> <input type="radio"/> Important uncertainty or variability 		

- Possibly important uncertainty or variability
- Probably no important uncertainty or variability
- No important uncertainty or variability

Outcomes	Importance	Certainty of the evidence (GRADE)
Independence in transfers - not measured	CRITICAL ^a	-
Pain - not measured	IMPORTANT ^b	-
Independence in activities of daily living - not measured	CRITICAL ^a	-
Capacity to stand - not measured	IMPORTANT ^c	-
Sitting balance - not measured	IMPORTANT ^c	-
Quality of life - not measured	CRITICAL ^d	-

- a. Identified as critical (4/6), important (2/6) by people with FA and critical by expert authors on this topic
- b. Identified as critical (2/6), important (2/6), and low importance (2/6) by people with FA and important by expert authors on this topic
- c. Identified as critical (3/6), important (3/6) by people with FA and important by expert authors on this topic
- d. Identified as critical (3/6) and important (3/6) by people with FA and critical by expert authors on this topic

Balance of effects

Does the balance between desirable and undesirable effects favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
<ul style="list-style-type: none"> ○ 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 	No published evidence.	<p>A survey designed to systematically collect expert-based opinions from clinicians involved in developing the recommendations for this topic and providing clinical care for individuals with Friedreich ataxia, was conducted. Clinical experts from Australia, Europe, UK, South America, Canada and the USA were asked to consider the harms/benefits of monitoring at least once per year as a management strategy for non-ambulant individuals.</p> <p>Reflecting on the impact of monitoring at least once per year on Independence in transfers, 100% (2/2) clinical experts reported a benefit (large, moderate or small), 0% (0/2) reported no effect</p>

		<p>and, 0% (0/2) reported observing a harm (large, moderate or small).</p> <p>Reflecting on the impact on <u>Pain</u>, 100% (2/2) clinical experts reported a benefit.</p> <p>Reflecting on the impact on <u>Independence in activities of daily living</u>, 100% (2/2) clinical experts reported a benefit.</p> <p>Reflecting on the impact on <u>Capacity to stand</u>, 100% (2/2) clinical experts reported a benefit.</p> <p>Reflecting on the impact on <u>Sitting balance</u>, 50% (1/2) clinical experts reported a benefit, 50% (1/2) reported no effect.</p> <p>Reflecting on the impact on <u>Quality of life</u>, 100% (2/2) clinical experts reported a benefit.</p>
--	--	--

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
<ul style="list-style-type: none"> <input type="radio"/> No <input type="radio"/> Probably no <input type="radio"/> Probably yes <input checked="" type="radio"/> Yes <input type="radio"/> Varies <input type="radio"/> Don't know 	No published evidence.	<p>The Friedreich's ataxia Clinical Management Guideline Patient and Parent Advisory Panel were asked if the intervention was acceptable (weighing up the balance between benefits, harms and costs).</p> <p>5/5 indicated that monitoring at least once per year was reasonable. (Aug 2020).</p>

SUMMARY OF JUDGEMENTS

PROBLEM	JUDGEMENT						
	No	Probably no	Probably yes	Yes		Varies	Don't know
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	Possibly important uncertainty or variability	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	Probably favors the intervention	Favors the intervention	Varies	Don't know

JUDGEMENT							
			comparison				
ACCEPTABILITY	No	Probably no	Probably yes	Yes		Varies	Don't know

TYPE OF RECOMMENDATION

Strong recommendation against the intervention <input type="radio"/>	Conditional recommendation against the intervention <input type="radio"/>	Conditional recommendation for either the intervention or the comparison <input type="radio"/>	Conditional recommendation for the intervention <input type="radio"/>	Strong recommendation for the intervention <input checked="" type="radio"/>
---	--	---	--	--

CONCLUSIONS

Recommendation

For individuals with Friedreich ataxia who are no longer ambulant, we recommend regular monitoring of mobility (including ability to transfer) and contributing physical factors for mobility decline (such as balance, strength, lower limb spasticity and environment set-up) at least once per year over less regular or informal monitoring.

Justification

Although there is no published evidence directly addressing the effectiveness of monitoring mobility for non-ambulant individuals with FRDA, annual decline seen in clinical practice warrants regular monitoring (at least annual) and assessment of mobility. This recommendation is consistent with recommendations made in the Ataxia UK Medical Guidelines (de Silva et al, 2019).

Subgroup considerations

This recommendation is for non-ambulant individuals with Friedreich ataxia.

Research priorities

Although there is no published evidence directly examining regular monitoring of mobility and less data on the rate of mobility decline in individuals with FRDA who are not ambulating, this is clearly best practice. Further research should focus on management strategies and treatments for mobility decline, to prevent loss or delay the loss of independence and improve quality of life.

References

de Silva RN, Greenfield J, Cook A, Bonney H, Vallortigara J, Hunt B, et al. Guidelines on the diagnosis and management of progressive ataxia in adults. *Orphanet J Rare Dis.* 2019;14:51.

Ejaz R, Chen S, Isaacs CJ, Carnevale A, Wilson J, George K, et al. Impact of mobility device use on quality of life in children with Friedreich ataxia. *J Child Neurol.* 2018;33(6):397-404.

Pandolfo M. Neurologic outcomes in Friedreich ataxia: Study of a single-site cohort. *Neurol Genet.* 2020;6(3):e415.

Rice LA, Ousley C, Sosnoff JJ. A systematic review of risk factors associated with accidental falls, outcome measures and interventions to manage fall risk in non-ambulatory adults. *Disabil Rehabil.* 2015;37(19):1697-705.