Evidence-Based Home Particle Repositioning Manoeuvres for BPPV

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NOTSA Training Day 2013
Brief Overview

* 2008
* **American** Academy of Neurology (**AAN**) *Fife et al.*
* **American** Academy of Otolaryngology-Head and Neck Surgery Foundation (**AAO-HNS**) *Bhattacharyya et al.*
* **Published** clinical practice guidelines for treating people with BPPV.
* **Based** on extensive reviews and quality of the existing literature.
* **Help** standardise best practice techniques for the treatment of BPPV.
Findings from several studies

* Most effective self-treatment for BPPVp is CRP.

Conclusion of AAN guidelines

* “….there is insufficient evidence to recommend or refute using Semont manoeuvre or CRP for [self-treatment of] BPPVp”.

AAN Guidelines (Fife et al 2008)
3 studies examined self-treatment manoeuvres for BPPVp.

Findings

* **Study 1:** Slightly greater improvements using self-treatment CRP after CRP treatment in clinic.

* **Study 2:** Self-treatment CRP more effective Brandt Daroff exercises (64% improvement cf 23%).

* **Study 3:** Self-treatment CRP more effective than modified Semont manoeuvre (95% improvement cf 58%).
Conclusion of AAO-NHS

* “Self-treatment of BPPVp may be an option in motivated individuals.”

* Brandt Daroff habituation exercises least effective self-treatment for BPPVp.
Rationale

- Relatively high recurrence rate of BPPV.
- Most common peripheral vestibular disorder.
- Improve efficacy of treatment provided in clinic.
Caution: Use of Self Treatment Manoeuvres for Canalolithiasis BPPVp

* **May** cause recurrence of BPPV (?p or others) when patient does CRP at home after treatment in the clinic (Fife et al 2008).

* **CRP for BPPVp** administered in clinic + self-treatment more effective than CRP alone (Helminski et al 2010).
Effectiveness of Particle Repositioning Maneuvers in the Treatment of Benign Paroxysmal Positional Vertigo: A Systematic Review

Helmsinki JO, Zee DS, Janssen I, Hain TC. Physical Therapy 2010

Parameters

* RCTs
* Quasi-RCTs
* Diagnosis of BPPVp
* PRM treatment
* Re-assessed 24 hours or more after treatment.
Findings

* Self-treatment CRP more effective than self-treatment Liberatory (Semont) manoeuvre for BPPVp.

* Brandt Daroff habituation exercises least effective self-treatment for BPPVp.
Evidence for self-treatment canalolithiasis BPPVp

- Self-treatment of BPPVp may be an option in motivated individuals (Bhattacharyya et al 2008).
- CRP more effective
  - Semont/Liberatory manoeuvre
  - Brandt Daroff exercises least effective.

Summary
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* **Conflicting findings**
  
  * **CRP +** self-treatment CRP at home more effective than CRP alone (*Helminski et al 2010*).

  * **CRP** self-treatment after treatment in the clinic may cause a recurrence of BPPVp (*Fife et al 2008*).

Paucity of evidence supporting self-treatment of the other BPPV variants.


Reference List


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* **Suzuki M**. Basic and clinical approach to BPPV based on model experimental results: The Society for Promotion of International Oto-Rhino-Laryngology; 2012.