

# **Vertigo and Dizziness: Common Complaints 3rd ed.**

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## **Chapter 5 - General Principles of Therapy**

雙和醫院 神經科 陳致中

# Outline

- 5.1 Physical Therapy (1 page)
- 5.2 Pharmacotherapy (7 pages) 内容最多
- 5.3 Psychological/Psychiatric and Behavior Treatment (0.25 page)
- 5.4 Surgical Treatment (0.5 page)

# Physical Therapy (p.84)

- Vestibular rehabilitation 機轉  
(1) 用其他 system 功能取代 (substitution) 有障礙的前庭功能，fMRI 研究可證  
(2) 促進 central vestibular compensation  
(3) Habituation
- 適應症 (1) acute and chronic vestibular deficits (2) central vestibular syndromes
- 首次需要治療師指導、之後自己回家做
- For AUVP: > 20 min tid x 8 wks
- For BV: qd lifelong (effect after 6-12 weeks)

- Liberatory maneuvers for BPPV 成效非常好

## Comments

- Episodic vestibular syndrome (VM, MD, VP) 需不需要做復健？
- Primary functional dizziness (沒有 vestibular deficits) 需不需要做復健？

Dunlap, P. M., Holmberg, J. M., & Whitney, S. L. (2019). Vestibular rehabilitation: Advances in peripheral and central vestibular disorders. *Current Opinion in Neurology*, 32(1), 137–144.

- **PPPD: 未明確提到有證據支持前庭復健有效，也沒說無效**
- **VM: There is weak data to support that vestibular rehabilitation is effective in the management of vestibular migraine as there are no current randomized trials to support its efficacy.**

- **MD: a systematic review by van Esch et al. found inconclusive evidence for a positive effect of vestibular rehabilitation in improving balance and quality of life in persons with Meniere's disease**

# Symptomatic therapy of acute vertigo, N/V (p.86)

- Max 1-3 days (delay vestibular compensation if used for an extended duration)
- 舉例：Diphenhydramine, diazepam, clonazepam, betahistine, ondansetron, scopolamine, metoclopramide, domperidone...
- Betahistine 不會抑制 vestibular compensation

## Comment

- Murdin, L., Hussain, K., & Schilder, A. G. (2016). Betahistine for symptoms of vertigo. The Cochrane Database of Systematic Reviews  
Betahistine 僅是比 placebo 有效、不是比其他藥有效
- Betahistine 用三天以上，似較可接受??

# Improvement of central compensation (p.87)

- 舉三個成份，動物實驗似乎有點效
  - (1) betahistine(+/-selegiline)
  - (2) N-acetyl-L-leucine
  - (3) Ginkgo extract
- 人體上皆沒有明證

## Comment

- Steroid 可以促進 central compensation 嗎？印象中，其他書籍還提過 memantine、dextromethorphan ... 等，本書略過。
- 個人在 pubmed 文獻搜尋發現：steroid 的 central compensation 證據蠻弱的

# Specific and curative pharmacotherapy (p.89)

- 以下都缺乏重要 RCT 支持：  
steroid for AUVP  
Tegretol/Trileptal/Lacosamide for VP  
betahistine/IT genta/IT steroid for MD  
acetazolamide for EA2  
Solaxin for DBN...

## Comment

- 的確是這個領域很弱的一環：比上雖不足，比下還算有餘
- 看來只有 prophylactic drugs for migraine (也許還不包括 VM) 是比較具有證據的
- 用藥物治療反應，來推斷診斷，自然也是不可行的。或許 VP 算是例外吧！

# Psychological/Psychiatric & Behavior Tx (p.91)

- 主要 for function dizziness ◦
- 本章簡單帶過，僅提 psychoeducation、CBT、desensitization、regular exercise、SSRI
- Secondary functional dizziness 也適用 ◦

## Comment

- desensitization：鼓勵 self-exposure 還是 programmed titration
- 要請病人 avoid exposure 嗎？



# Surgical Therapy (p.91)

- 僅少數頭暈需考慮開刀
- 本章蜻蜓點水一下：  
vestibular schwannoma 、  
cavernoma (excision,  
GKS) 、 third mobile  
windows (canal plugging,  
resurfacing, capping) 、 VP  
(decompression) 、 BV  
(vestibular implants)



**THE END**