

Geriatric falls and BPPV

Are canal repositioning manoeuvres enough?

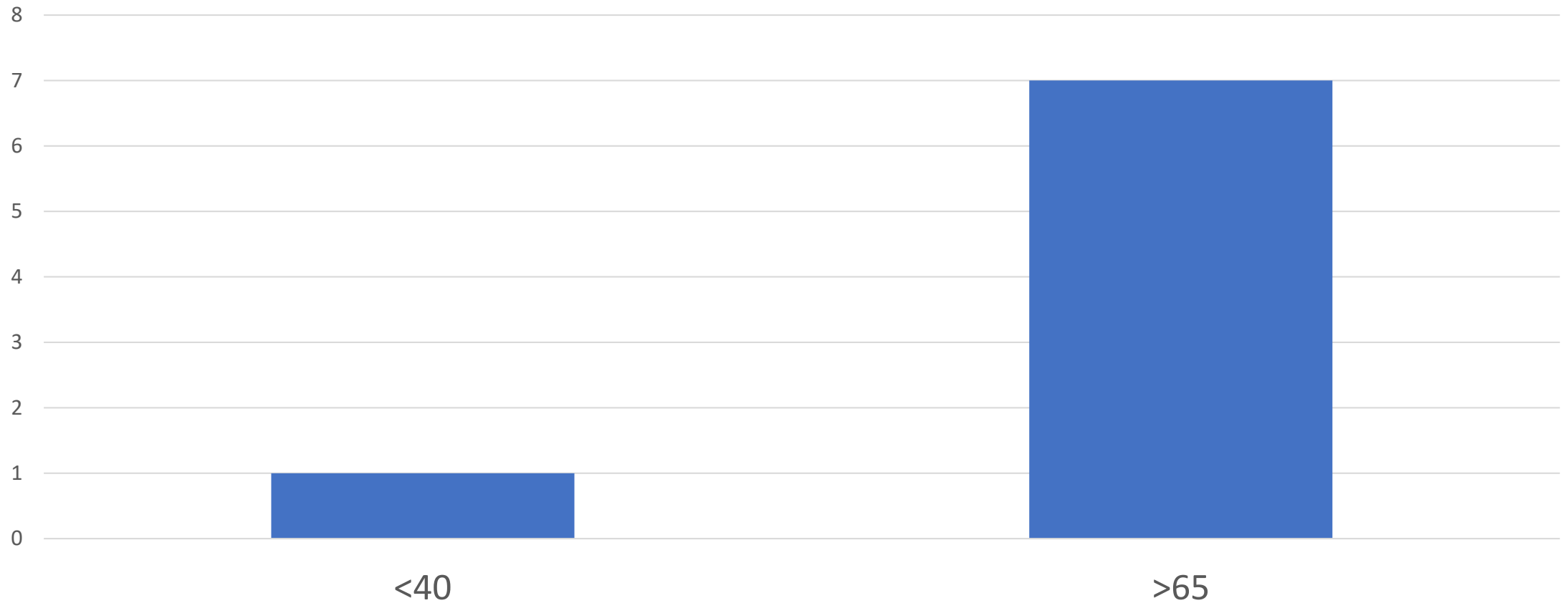
John Lee
Physiotherapist
Proactive

Content

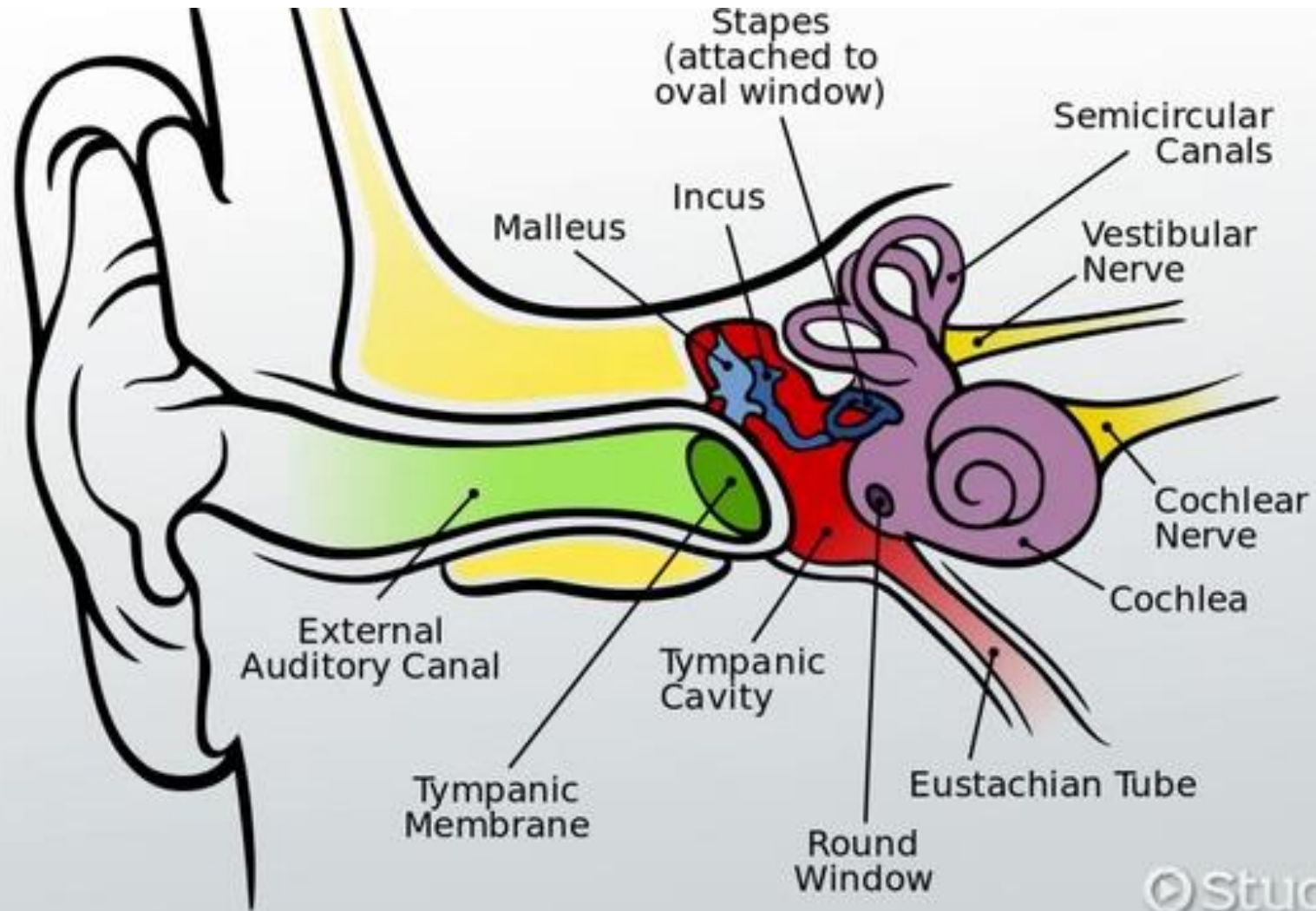
- Introduction
- Differential diagnosis
- Latest recommendation
- Possible theories behind residual dizziness
- Case study
- Onward referral
- Questions

Statistics

Odds of developing vestibular symptoms



Anatomy





Why is there nystgamus?

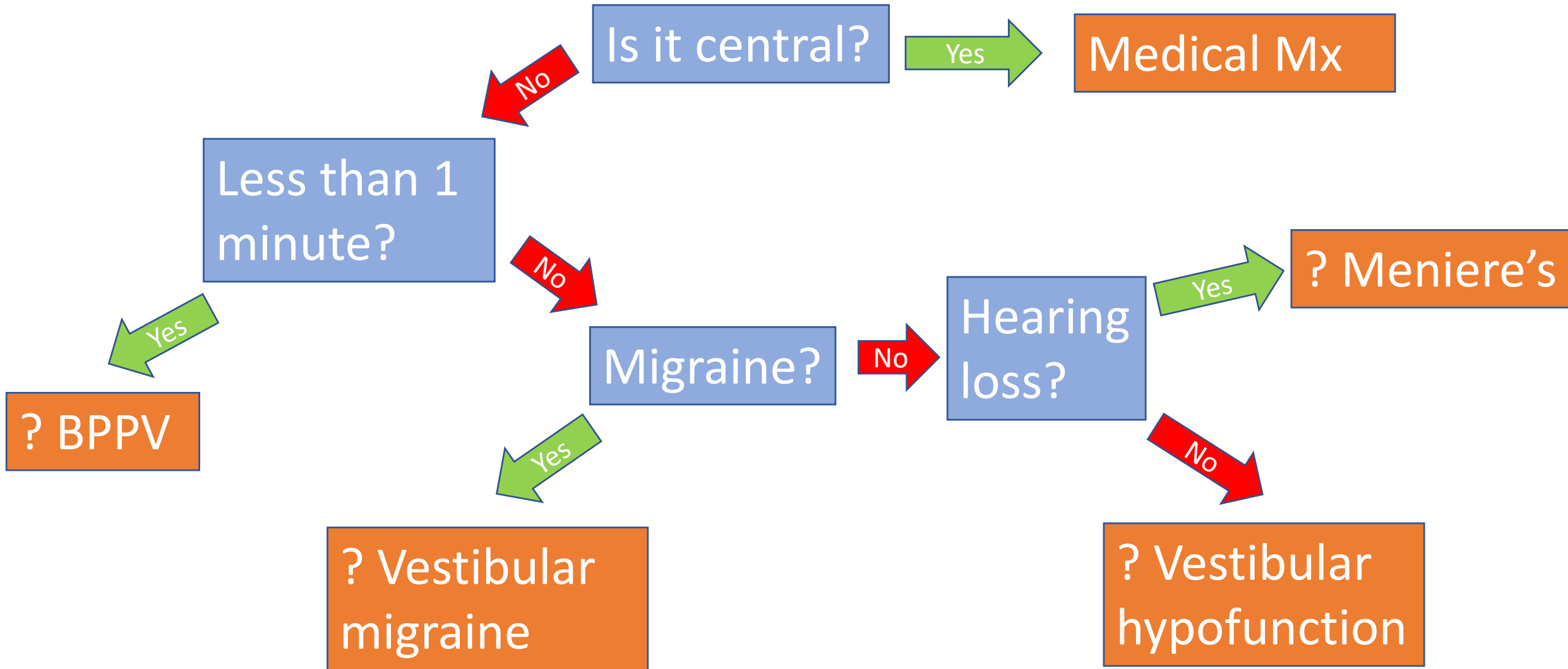


Left ear

Eyes

Right ear

Diagnostic algorithm



Presentation

Younger adults	Older adults
More rotatory vertigo	Less rotatory vertigo
Clearer and more consistent history	Non-specific history
Minimal instability	More instability
Lower rates of residual dizziness (11.6 ± 3.9 days)	Higher rates of residual dizziness (13.4 ± 7.5 days)

Residual dizziness (RD)

- RD is present in 31-61% of patients who had successful CRP
- It usually lasts a few days to several weeks
- Strongly correlates to duration of vertigo before successful CRP and anxiety disorders

Teggi et al 2010

Giommetti et al 2017

Possible theories

Tiny amount of residual debris

Incomplete central adaptation

Fixed the canal but what about the otolith?

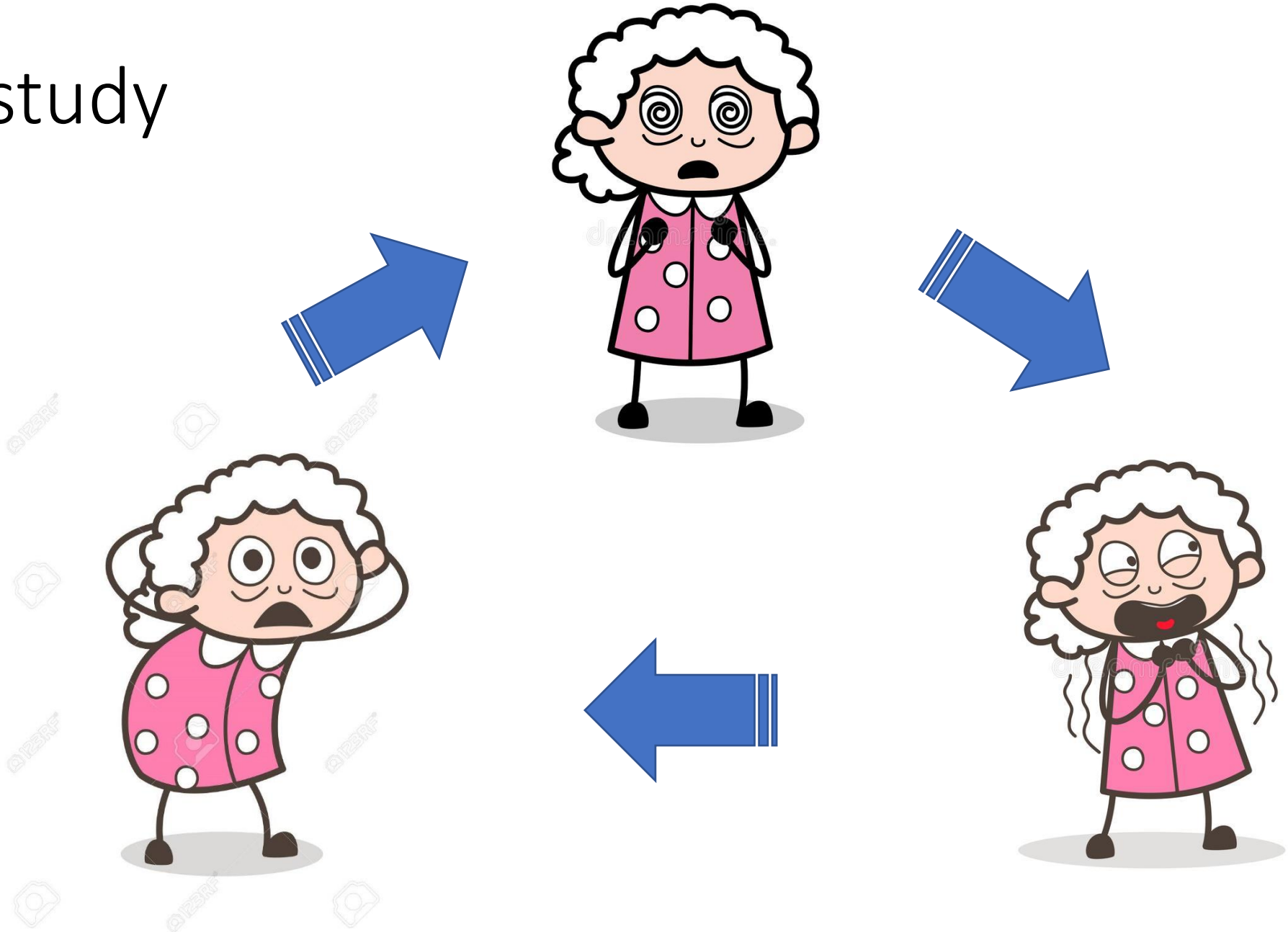
Impact to the Autonomic system

VOR X 1

1. Object to remain in focus
2. Go as fast as you can
3. Slight dizziness is OK
4. Target: 120hz



Case study



Who do we need to refer?



Ahearn & Umapathy 2015

Giommetti et al 2017

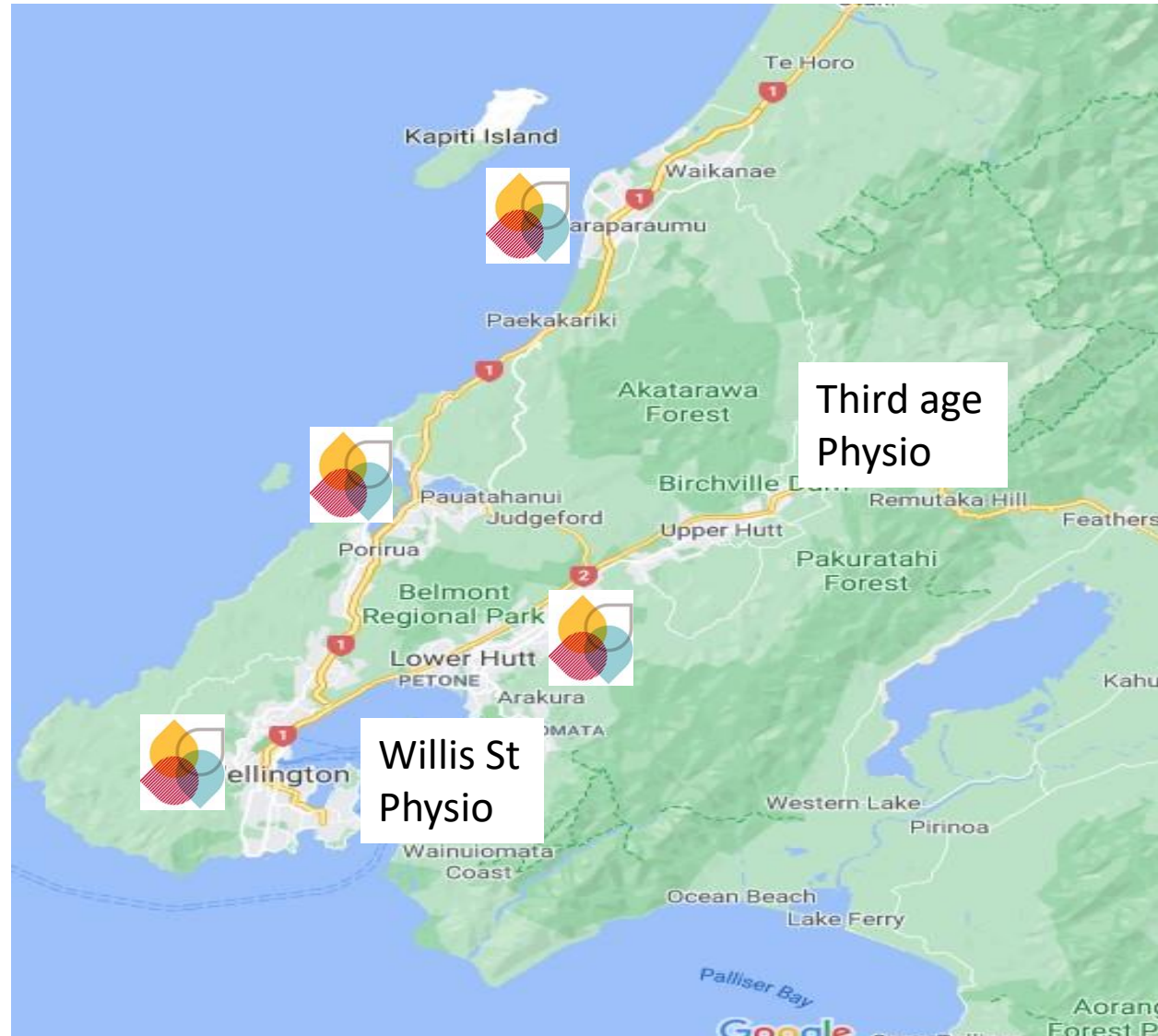
Who can I refer to?

Proactive

- Taranaki St
 - Wakefield Hospital
 - Lower hutt – Les mills
 - Porirua – Te Ruaparaha arena
 - Kapiti – City fitness@Coastland
- 04 281 0269**

DHB

- Ewart building – Newtown
- Kenepuru hospital
- Kapiti health centre
- Hutt Hospital



BPPV relief app

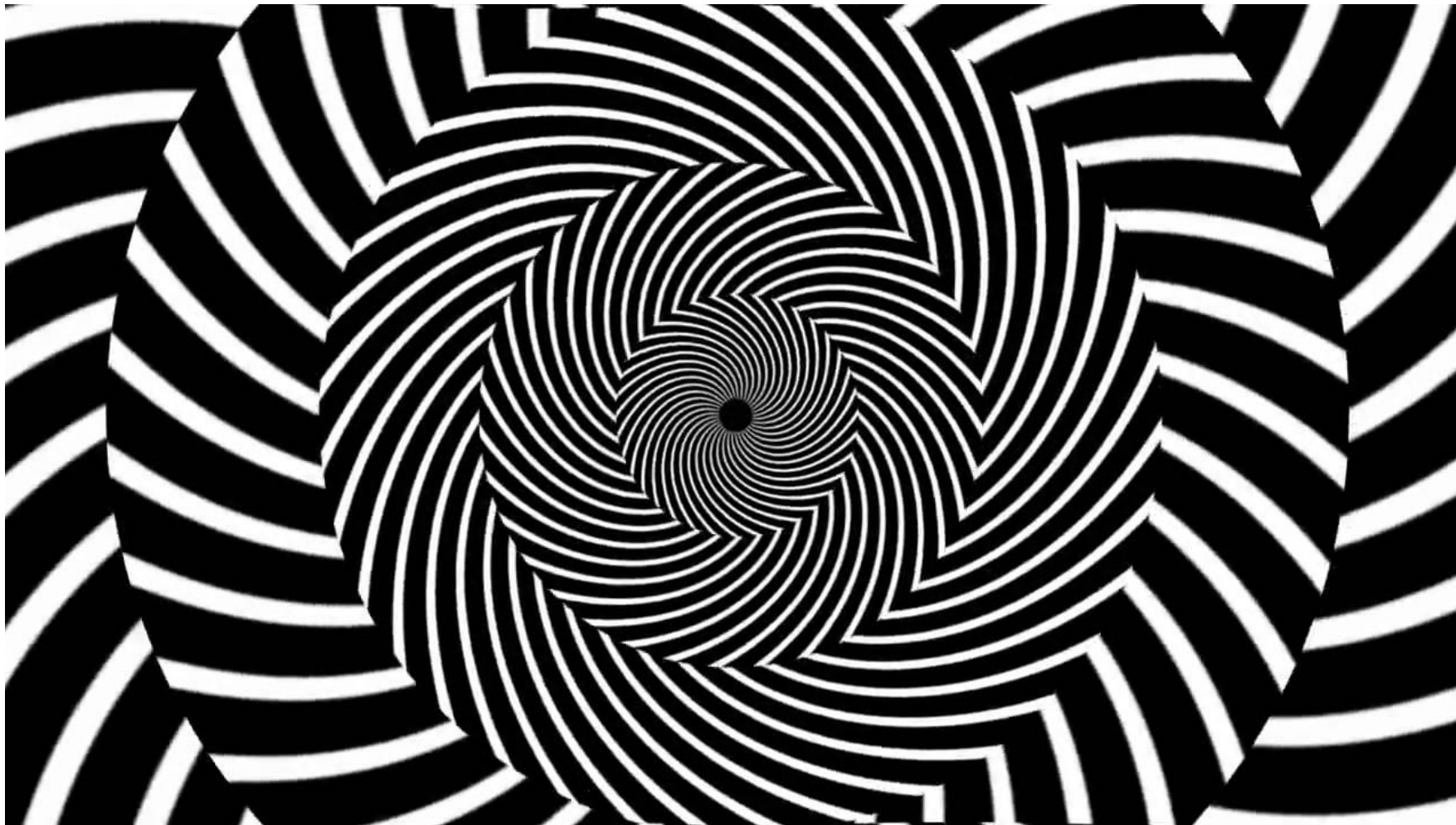
Carol Rogers
Third age Physio
16 James Nairn Grove
04 212 4851

Caroline Appleton
Willis Street
physiotherapy
Level 9, 57 Willis Street
04 384 8313

Take home message



Questions?



References

- Ahearn, D. J., & Umapathy, D. (2015). Vestibular impairment in older people frequently contributes to dizziness as part of a geriatric syndrome. *Clinical Medicine, 15*(1), 25-30. <https://doi.org/10.7861/clinmedicine.15-1-25>
- Balatsouras, D., Koukoutsis, G., Fassolis, A., Moukos, A., & Aspris, A. (2018). Benign paroxysmal positional vertigo in the elderly: Current insights. *Clinical Interventions in Aging, 13*, 2251-2266. <https://doi.org/10.2147/cia.s144134>
- Giommetti, G., Lapenna, R., Panichi, R., Dehgani Mobaraki, P., Longari, F., Ricci, G., & Faralli, M. (2017). Residual dizziness after successful repositioning maneuver for idiopathic benign paroxysmal positional vertigo: A review. *Audiology Research, 7*(1), 31-37. <https://doi.org/10.4081/audiore.2017.178>
- Teggi, R., Giordano, L., Bondi, S., Fabiano, B., & Bussi, M. (2010). Residual dizziness after successful repositioning maneuvers for idiopathic benign paroxysmal positional vertigo in the elderly. *European Archives of Oto-Rhino-Laryngology, 268*(4), 507-511. <https://doi.org/10.1007/s00405-010-1422-9>