The diagnostic accuracy of history taking and physical examination for patients with vertigo in general practice: the VERDI study

Published: 14-02-2023
Last updated: 07-04-2024

To investigate the diagnostic accuracy of history taking and physical examination for patients with vertigo in general practice, inorder to construct an easy-to-use diagnostic algorithm for daily clinical practice.

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Other condition
Study type	Observational non invasive

Summary

ID

NL-OMON53735

Source
ToetsingOnline

Brief title
VERtigo DIagnosis (VERDI)

Condition

- Other condition

Synonym
dizziness, vertigo

Health condition

het symptoom - en niet de aandoening - draaiduizeligheid

Research involving

Human

Sponsors and support

Primary sponsor: Amsterdam UMC
Source(s) of monetary or material Support: ZonMw

Intervention

Keyword: diagnostic accuracy, general practice, vertigo

Outcome measures

Primary outcome

We will calculate sensitivity, specificity, predictive values, and likelihood

ratios, followed by decision rules for each target condition and an overarching

easy-to-use diagnostic algorithm for daily clinical practice.

Secondary outcome

Not applicable.

Study description

Background summary

Vertigo is a common symptom that increases with age. The impact for patients is enormous: four out of five patients with vertigo report severely impairing symptoms, leading to sick leave, medical consultation, interruption of daily activities, and/or avoidance of leaving the house. In older patients, vertigo is associated with anxiety, depression, social isolation, and falling. The economic burden is substantial, due to repeated consultations, excessive use of diagnostic imaging, emergency care, and decreased productivity.

More than 80% of the patients with vertigo are primarily treated by their general practitioner (GP) and never referred to a medical specialist. Despite this therapeutic responsibility, the GP*s diagnostic toolkit has serious limitations. All recommended tests lack empirical evidence, because a diagnostic accuracy study on vestibular disease has never been performed in primary care. This scientific gap was identified and highly prioritized by the National General Practice Research Agenda (4.5.6 NERVOUS SYSTEM, ICPC N;

priority 3/10; ID 549/554).

With the VERtigo DIagnosis study (VERDI, a famous Italian composer who experienced frequent episodes of dizziness and died of stroke) we will fill this gap. We will construct a diagnostic algorithm that enables GPs to identify more accurately and efficiently underlying causes in patients with vertigo. This may lead to faster and more targeted treatment, less diagnostic imaging and referral, less prescribing of antivertigo drugs, and improvement of the overall outcome for patients with vertigo in general practice.

Study objective

To investigate the diagnostic accuracy of history taking and physical examination for patients with vertigo in general practice, in order to construct an easy-to-use diagnostic algorithm for daily clinical practice.

Study design

Prior to this study, we performed an extensive literature study in order to identify available diagnostic tests for patients with vertigo in general practice. The result of this literature was evaluated by a panel of experts on dizziness/vertigo during an international Delphi procedure. The expert panel recommended to investigate all diagnostic tests recommended by the Dutch Guideline on Dizziness and to add three diagnostic bedside tests to the test procedure.

During the present study, we will perform a diagnostic accuracy study. During this study, we will compare each index test (and combinations of tests) with the respective reference standard as recommended by the Bárány Society. We will focus on five target conditions that account for more than 95% of the vertigo diagnoses in general practice: 1. benign paroxysmal positional vertigo (BPPV), 2. vestibular neuritis, 3. Meniere*s disease, 4. vestibular migraine, and 5. central causes of vertigo. With the results we will construct decision rules per target condition and an overarching easy-to-use diagnostic algorithm for daily clinical practice.

Study burden and risks

Participation in the VERDI study does not imply risks. When participating, the burden is limited. During the physical examination, patients may experience limited, transient, dizziness-related discomfort that is similar to transient discomfort when undergoing a regular physical examination by a GP. The additional test videoelectronystagmography (VNG), which can be considered usual secondary care and is during VERDI only performed on medical indication, may cause limited dizziness. Mostly, this will disappear after a few minutes. In

rare cases, the dizziness will persist a bit longer.

Contacts

Public
Amsterdam UMC

Boelelaan 1117
Amsterdam 1081HV
NL
Scientific
Amsterdam UMC

Boelelaan 1117
Amsterdam 1081HV
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

a. Aged 18 years and over; AND
b. New episode of vertigo and/or 'episodic vestibular syndrome' (definition Bárány Society); AND
c. Reporting symptoms to the general practitioner during (telephone) consultation or home visit.

Exclusion criteria

a. Serious comorbid conditions that preclude participation in the VERDI study (judgement of patient*s GP); OR
b. Severe cognitive impairment (judgement of patient*s GP); OR
c. Insufficient mastery of Dutch and English language.

Study design

Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Diagnostic

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	21-02-2023
Enrollment:	960
Type:	Actual

Ethics review

Approved WMO

Date:	14-02-2023
Application type:	First submission
Review commission:	METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL83111.029.22