



צור•ZUR

ZUR BALANCE

**ד"ר עוז צור- פיזיותרפיסט מומחה  
מנהל המרכז הישראלי לטיפול  
בסחרחורת, חוסר שווי משקל וכאב**

**[zurbalance@gmail.com](mailto:zurbalance@gmail.com)**

**09-7440429**

[www.zur-balance.co.il](http://www.zur-balance.co.il)



זור·ZUR

ZUR BALANCE

# Clinical Examination for assessing the dizzy patient

Dr. Oz Zur PhD PT

[www.zur-balance.co.il](http://www.zur-balance.co.il)



ר.י.צ. ZUR

ZUR BALANCE

# Clinical Examination

- **Oculomotor examination**

## In room light

- Non vestibular: extraocular movements, pursuit, saccades, VORc, diplopia.
- Vestibular: skew, spontaneous and gaze-evoked nystagmus, VOR to slow and rapid head thrusts, visual acuity, test with head stationary and during gentle oscillations of the head.
- With Frenzel lenses: spontaneous and gaze-evoked nystagmus, hyperventilation induced nystagmus, and positional nystagmus.



ר.י.צ. ZUR

# Clinical Examination

- **Sensations**
  - Somatosensation
  - proprioception, light touch, vibration;  
quantified tests: vibration threshold,  
tuning fork test
  - Vision: visual acuity and field.

ZUR BALANCE



זור·ZUR

# Clinical Examination

- **Coordination**

Optic ataxia/past pointing, rebound, diadokokinesia, heel to shin, and postural fixation.

- **Range of motion: Active and passive**

Upper and lower extremity, neck (rotation, extension, flexion, lateral flexion).



ר.י.צ. ZUR

# Clinical Examination

- **Strength (gross)**

Grip, upper extremity, lower extremity, trunk.

- **Postural deviations**

Scoliosis, kyphosis, lordosis

- **Positional testing**

Halpike-Dix, side-lying test, roll test.

ZUR BALANCE



ר.י.צ. ZUR

# Clinical Examination

- **Motion sensitivity**

Motion and position induced dizziness

- **Sitting balance: Active or passive, anterior-posterior, and lateral**

Weight shift, head righting, equilibrium reactions, upper and lower extremity, ability to recover trunk to vertical



ר.ז.ר. ZUR

# Clinical Examination

- **Static balance (performed with eyes open and closed)**

Romberg, sharpened Romberg, signal leg stance, stand on rail, force platform.

- **Balance with altered sensory cues**

Eyes open and closed, foam.



ר.י.צ. ZUR

ZUR BALANCE

# Clinical Examination

- **Dynamic balance (self-initiated movements)**

Standing reach (Duncan), Functional (Gabell and Simons), Fukuda's stepping test.

- **Ambulation**

Normal gait, tandem walk, walk with turning head, Singleton to right or left, Dynamic Gait Index.



ר.י.צ. ZUR

# Clinical Examination

- **Functional gait assessment**
- Obstacle course,
- double-task activities,
- stairs, ramps, grass, sand

ZUR BALANCE

[www.zur-balance.co.il](http://www.zur-balance.co.il)



ר.י.צ. ZUR

ZUR BALANCE

# Clinical Examination

- **Oculomotor**
  - In room light: skew deviation, spontaneous and gaze-evoked nystagmus, VOR to slow and rapid head thrusts, visual acuity test with head stationary and during gentle oscillations of the head
  - With Frenzel lenses: Spontaneous nystagmus, positional nystagmus



ר.י.צ. ZUR

# Clinical Examination

- **Range of motion**

Neck (rotation, extension, flexion, lateral flexion).

- **Positional testing**

Hallpike-Dix, side-lying test, roll test.



ר.ז.ר. ZUR

# Clinical Examination

- **Static balance (performed with eyes open and closed)**

Romberg, sharpened Romberg, single leg stance.

- **Balance with altered sensory cues**

Eyes open and closed, foam.



זור·זור

# Clinical Examination

- **Ambulation**

Normal gait, tandem walk, walk while turning head, Singleton to right and left, Dynamic Gait Index.

- **Functional gait assessment**

Obstacle course, double-task activities, stairs, ramps, grass, sand.



ג.י.צ.זור

ZUR BALANCE

# Typical Position and Movements

| Baseline Symptoms                           | Intensity | Duration | Score |
|---|-----------|----------|-------|
| 1. Sitting to supine                        |           |          |       |
| 2. Supine to left side                      |           |          |       |
| 3. Supine to right side                     |           |          |       |
| 4. Supine to sitting                        |           |          |       |
| 5. Left Hallpike-Dix                        |           |          |       |
| 6. Return to sit from left Hallpike-Dix     |           |          |       |
| 7. Right Hallpike-Dix                       |           |          |       |
| 8. Return to sit from right Hallpike-Dix    |           |          |       |
| 9. Sitting, head tipped to left knee        |           |          |       |
| 10. Head up from left knee                  |           |          |       |
| 11. Sitting, head tipped to right knee      |           |          |       |
| 12. Head up from right knee                 |           |          |       |
| 13. Sitting, turn head horizontally 5 times |           |          |       |
| 14. Sitting, move head vertically 5 times   |           |          |       |
| 15. Standing, turn 180° to the right        |           |          |       |
| 16. Standing, turn 180° to the left         |           |          |       |