

VBI Screening Tests

Patient name: _____ Age: _____

Examiner: _____ Date: _____

Vertebral basilar insufficiency (VBI) is a condition in which there is reduced blood flow to the back part of the brain, known as the vertebrobasilar system. This can lead to various symptoms, such as dizziness, headaches, and difficulty with balance and coordination.

The following are some of the most common tests used to help assess VBI. Please check the test/s you performed and choose the corresponding results from the options provided. Use the Additional Notes section to record any further details.

Vertebral artery test

1. Place the patient in a supine position and perform a passive extension and side flexion of the head and neck.
2. Perform passive rotation of the neck to the same side and hold for approximately 30 seconds.
3. Repeat the test with head movement to the opposite side.
4. Observe for dropping of the arms, loss of balance, or pronation of the hands; a positive result indicates decreased blood supply to the brain.

Performed? Yes No

Interpretation:

- Positive test:** A positive test result suggests a decrease in blood flow to the brain, indicating possible VBI.
- Negative test:** A negative test result indicates normal blood flow to the brain. However, further testing is needed to rule out VBI.

Modified vertebral artery test

1. Rotate the patient's head to the opposite side of the tested side maximally and hold for 10 seconds.
2. Return the patient's head to a neutral position for 10 seconds.
3. Extend the patient's head for 10 seconds.
4. Return the patient's head to a neutral position for 10 seconds.
5. Extend and rotate the patient's head (against the opposite tested side) maximally for 10 seconds.

Performed? Yes No

Interpretation:

- Positive test:** The patient experiences dizziness, vertigo, nystagmus, or other neurological symptoms during the test. This indicates a possible VBI.
- Negative test:** The patient does not experience any of these symptoms during the test,. However, further testing is needed to rule out VBI.

Extension rotation test

1. Position the patient in a supine lying position with the head above the edge of the table.
2. Support the patient's head.
3. Rotate the patient's head submaximally to one side.
4. Bring the patient's head into extension.
5. Hold this position for 30 seconds.
6. Talk to the patient or have them count to 20 to observe for changes in speech.
7. Monitor the patient's eyes for any signs of nystagmus.

Performed? Yes No

Interpretation:

- Positive test:** The patient experiences dizziness, vertigo, nystagmus, or other neurological symptoms during the test. This indicates a possible VBI.
- Negative test:** The patient does not experience any of these symptoms during the test. However, further testing is needed to rule out VBI.

Additional notes

Healthcare professional's information

Name:

License number:

Contact details:

Signature:

Physiopedia. (n.d.). *Vertebral artery test*. https://www.physio-pedia.com/Vertebral_Artery_Test

Physiotutors. (n.d.). *Extension rotation test | vertebrobasilar insufficiency (VBI)*. <https://www.physiotutors.com/wiki/extension-rotation-test/>