Very important remarks

- Changing light conditions dramatically alter the calibration factors.
- It is crucial to perform calibrations repeatedly throughout the entire ENG.
- The clinician should never rely blindly on the computer output without inspecting the traces and the calculation results.
- Patients referred for ENG should not take tranquillisers, sedatives or alcohol for 48h before testing.
- Continuous visualisation of the patient and monitoring of the eye recordings are essential for test accuracy as well as for patient comfort and safety.
- Patient alertness has a major effect on the VOR. Ensure optimal alertness of the patient throughout the ENG examination.
- A clinically significant spontaneous nystagmus should appear consistently throughout the ENG test.
Failure in the ocular motor pathways usually leads to consistently abnormal patterns. The patient can therefore either perform the test or not perform the test at all. Decreased alertness interferes with repeatability.

During rotational testing, let the patient perform mental tasks, such as counting backwards in steps of 3.

Do not talk continuously to the patient because that provides orientation clues that influence the VOR.

If the gain is too low, measures of asymmetry or phase are inaccurate, and should be interpreted with caution.

**Caloric test**

- Maintain alertness throughout the caloric test.
- Calibrate prior to each irrigation since, in particular, the effect of the stimulus changes the impedance of the electrodes (due to sweating etc). Calibration is therefore required before each irrigation.
- Caloric responses should be consistent. If one out of four irrigations does not concur with the others, it should be repeated.

**Conclusion**

- Every laboratory is strongly advised to establish its own normative data.
- Meta-analysis indicates an upper normal limit for labyrinth asymmetry of 22% and for directional labyrinth preponderance of 26%.
- A dedicated and well-trained technician is crucial for the reliability of vestibular tests.

**References**

7. [No authors listed]. Evaluation of tests for vestibular function. Committee on Hearing, Bioacoustics, and Biomechanics. Commission on
Normative data in ENG and VNG


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