

**PRELIMINARY STUDY: NORMATIVE DATA OF WATER CALORIC TEST USING
VIDEONYSTAGMOGRAPHY MACHINE AT PUSAT PERUBATAN UNIVERSITI
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Caloric test is the test used to evaluate the vestibular system. However, normative data for the caloric test cannot be used widely for every clinic. Each clinic must obtain their own normative data based on the parameters of measurement and interpretation methods used. The purpose of this study was to establish normative data for water caloric test using Visual Eyes™ Videonystagmography. Thirty subjects participated in this study and the age range from 22 to 34 years. Fifteen persons were re-tested in a test period of not more than a week. The study was conducted at Electronystagmography room, Otorhinolaryngology Clinic, Pusat Perubatan Universiti Kebangsaan Malaysia (PPUKM). This test took about 40 minutes for each subject. Subjects were irrigated with cool (30°C) and warm water (44°C) for each ear and total irrigations were four irrigations which are left cool, right cool, left warm and right warm with 30 seconds time of irrigations. Irrigations were carried out while subjects lying supine with the head elevated by 30 degrees above. Descriptive analysis was used to establish normative data for water caloric test using Videonystagmography machine. Values presented in the form of mean ± standard deviation. The results of the study is in the form of total Slow Phase Velocity (107.27 ± 58.44), Directional Preponderance ($13:43 \pm 10:13$), Reduced Vestibular Response (13.13 ± 10.01) and Slow Phase Velocity (SPV) for each of the irrigations. Independent t-test was used as a statistical analysis to compare the mean of the test and re-test results. The $p > 0.05$ value indicates no significant difference between the mean value of the total SPV, DP, and RVR. In conclusion, these findings were consistent with normative data provided by Visual Eyes™ Videonystagmography machine manufacturers. This machine produces accurate results and has no variation in the water caloric test. This data is used in the vestibular clinic to diagnose patients with peripheral vestibular problem.

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