

COMPARISON OF TYMPANOMETRY FINDINGS OBTAINED BY USING GRASON STADLER TYMPSTAR AND MADSEN OTOFLEX 100 IN YOUNG ADULTS

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The main objective of this research is to compare the mean value of tympanometry parameters obtained with Grason Stadler Tymptstar and Madsen Otoflex 100. Also, this researcher aims to find the test-retest reliability of data obtained from both instruments. Parameters that are including in the recording are static admittance (SA), equivalent ear canal volume (EEVC) and tympanometric peak pressure (TPP). Otoscopic examination, screening tympanometry and diagnostic pure tone audiometry (PTA) were done on 99 female subjects aged 19 to 24 years old residing in Kolej Tun Syed Nasir. Using nonparametric analysis, Wilcox showed that there are significant differences in all the tympanometric parameters obtained using both tympanometers. Mean value of parameters for Grason Stadler Tymptstar on SA, EEVC and TPP are 0.50 mmhos, 1.11cm³ and -5.75 daPa whereas mean value obtained using Madsen Otoflex 100 on SA, EEC and TPP are .39 mmhos, 0.85 cm³ and 0.69 daPa. By using *Intraclass Correlation Coefficient (ICC)*, result showed that correlation values on all parameters obtained from both tympanometers are high which are very near to 1.0. This research showed that there are 2 different normative data needed for these two different tympanometers due to the significant difference of mean value on all tympanometric parameters.

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