THESIS TITLE Auditory Brainstem Response (ABR) A Normative Study in Thai Normal Hearing Adults

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ABSTRACT

Auditory Brainstem Responses are the far-field electrical activity recorded from the auditory pathway. The purpose of this study was to obtain normative data for the Hortmann ABR (SH221) unit. Forty normal hearing adults were used as subjects for this study. The recordings were made at 90, 70, 50 dBHL. The filter setting was at 1.0 to 3.5 KHz. The click rate was at 20 per second. The analysis of variance was used to compare the mean absolute and interpeak latencies. The factor of groups (male vs. female), ears (right vs. left), waves (I, III, V), interpeaks (I-III, III-V, I-V) and intensities (90, 70, 50 dBHL) were considered in the comparison. The results showed the absolute and interpeak latencies of both ears were not different, but there were significant differences between the male and female subjects and among the intensities. The normative data obtained from this study was compared to previous research. The results indicated

that the data fell within acceptable ranges and could be used as normative values. 65% of subjects had different wave IV - V complex between ears. 99% of the subjects had amplitude ratio of V:I was greater than 1 at 50 dB. The percentage reduced at 70 and 90 dBHL.