

ABBREVIATION INDEX

S.No	Abbreviation	Description
1	<u>ANSD</u>	Auditory Neuropathy Spectrum Disorder
2	<u>AN</u>	Auditory Neuropathy
3	<u>AD</u>	Auditory Dys-Synchrony
4	<u>SNHL</u>	Sensori Neural Hearing Loss
5	<u>PTA</u>	Pure Tone Audiometry
6	<u>BOA</u>	Behavioural Observation Audiometry
7	<u>FFA</u>	Free-Field Audiometry
8	<u>IA</u>	Impedance Audiometry
9	<u>MEMR</u>	Middle Ear Muscle Reflex
10	<u>MLV</u>	Monitored Live Voice
11	<u>SDS</u>	Speech Discrimination Score
12	<u>SDT</u>	Speech detection thresholds
13	<u>SRT</u>	Speech Reception Threshold
14	<u>OAE</u>	Oto Acoustic Emission
15	<u>DPOAE</u>	Distortion Product Oto Acoustic Emission
16	<u>ABR</u>	Auditory Brain Stem Response
17	<u>PTAR</u>	Pure Tone Audiometry Right Ear
18	<u>PTAL</u>	Pure Tone Audiometry Left Ear
19	<u>SATR</u>	Speech Awareness Threshold Right Ear
20	<u>SATL</u>	Speech Awareness Threshold Left Ear

21	<u>DPR</u>	Distortion Product Right Ear
22	<u>DPL</u>	Distortion Product Left Ear
23	<u>NFR</u>	Noise Floor Right Ear
24	<u>NFL</u>	Noise Floor Left Ear
25	<u>SNRR</u>	Signal to Noise Ratio Right Ear
26	<u>SNRL</u>	Signal to Noise Ratio Left Ear

TABLE INDEX

Table No	Topic	Page No
2.1	Distribution of 730 children with SNHL separately for girls and boys as per age group.	30
4.1-a.	Disorder wiz descriptive statistics and t-tests for all variables.	42
4.2-b.	Sex wiz descriptive statistics and t-tests for all variables.	47
4.3-c.	Descriptive statistics and t-tests for all variables for male participants.	51
4.4-d.	Sex wiz descriptive statistics and t-tests for all variables for female participants.	54

FIGURE INDEX

Figure No	Figure	Page No
Figure 1.1	Anatomical Structure of Inner Ear&Auditory Pathway	4
Figure 3.1	Diagrammatic distribution of 39 children with ANSD separately for girls and boys (n = 39).	39
Figure 3.2	Related etiologies associated with ANSD children	41
Figure 4.1	Bilateral profound sensori neural hearing loss.	59
Figure 4.2	Abnormal ABR with present cochlear microphonics (CM).	59
Figure 4.3.1	Normal DPOAE Test Report for Right Ear.	59
Figure 4.3.2	Normal DPOAE Test Report for Left Ear.	59

PHOTO INDEX

Photo No	Photo	P.No
Photo 2.1-a	Showing Clinical Audiometer AC – 40 used for data collection for Pure Tone audimetry, Free field audiomatery, Play audiometry and Speech audiometry.	33
Photo 2.2-b	Showing AT235 middle ear analyzer was used for tympanometry & MEMR using a 226 Hz probe tone.	33
Photo 2.3-c	Showing MAICO, OAE Analyzer used for DPOAE.	33
Photo 2.4-d	Showing Biologic Navigator pro instrument and set up used for data collection and for testing ABR	33
Photo 2.5-e	Showing electrode placement & montage for testing ABR	34

INDEX

No.	Topics	Page No.
I	INTRODUCTION	1-9
II	REVIEW OF LITERATURE	10-28
III	METHODOLOGY	29-36
IV	RESULTS AND DISCUSSION	37-59
V	SUMMARY AND CONCLUSION	60-65
•	REFERENCES	66-79
•	APENDIX	80-107