A Staggered Spondaic Word (SSW) Test for Australian Use

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The Central Auditory Nervous System (CANS) forms a major part of the auditory system as a whole and yet the clinical investigation of Central Auditory Disorders (CAD) is often ignored. The clinical presentation of CAD is therefore briefly reviewed. The Staggered Spondaic Word (SSW) test’s development and clinical usefulness, as one of the most popular tools in the assessment of CAD, is also discussed. The purpose of the present study was to develop an Australian version of the SSW to be made available for use in local clinics on adult populations. The standard SSW materials were recorded using a female Australian speaker and the resultant material was edited using the Digidesign audio editing software package. The Mark I version was then field trialled on 10 normal hearing subjects who were found to make significant errors on 2 items. These were subsequently removed and substitutes were made (Mark II). The Mark II version was then trialled on 30 normal subjects and on patients with known disorders of the central auditory system and the outcomes are reviewed. These preliminary results indicate that the Australian version of the SSW test (Macquarie SSW or MSSW test) will be a valuable tool in the identification of CAD.

The Incidence of Conductive Hearing Loss in Infants with Cleft Palates Below 6 Months of Age

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The incidence of conductive hearing loss and associated middle ear pathology in infants with cleft palates aged above 6 months is well documented. This study provides evidence for the prevalence of conductive hearing loss and middle ear pathology in infants with cleft palates below 6 months of age. The existence of middle ear effusion was investigated using Auditory Brainstem Response testing, multiple probe tone impedance audiometry and analysis of latency-intensity function. Results show a high incidence of significant conductive hearing loss in infants below 6 months of age. The incidence of conductive hearing loss and associated middle ear pathology in infants with cleft palates below 6 months of age and its clinical implications are discussed.

Central Auditory Processing in Schizophrenic Patients suffering from Auditory Hallucinations

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Studies have shown deficits on some specific auditory tasks in schizophrenic patients. Other studies have shown neuroanatomical abnormalities, in the temporal lobes in particular, associated with auditory hallucinations in schizophrenia, although conflicting findings have been reported. The purpose of this study was to comprehensively investigate central auditory processing in schizophrenic patients suffering from auditory, verbal hallucinations. An audiological test battery was performed on a group of 20 schizophrenic patients suffering from verbal hallucinations.
and a group of 20 normal controls, matched for age, sex, educational standard and
handedness, in order to determine whether specific central auditory processing
deficits are related to the presence of auditory hallucinations. The hallucinators as a
group were shown to have essentially normal middle ear, cochlear, VIII nerve and
brainstem function as evidenced by normal pure-tone thresholds, speech discrimina-
tion in quiet, tympanometry, stapedial reflexes, Rapidly Alternating Speech
Perception, binaural fusion and Auditory Brainstem Response results. Staggered
Spondaic Word and dichotic consonant-vowel testing revealed significant differ-
ences between hallucinators and controls, while Competing Environmental Sounds
testing revealed no significant differences between groups. Significant differences
emerged between hallucinators and controls for speech in the presence of ipsilateral
competition. Tone frequency pattern sequences revealed deficits in verbal responses
but not hummed responses in the hallucinator group. These results suggest specific
abnormalities relate to verbal processing in hallucinators. A further comparison with
a group of non-hallucinating psychotic patients is in progress to determine whether
these findings are specific to hallucinations.

The Australia-Indonesia Collaborative Hearing Project in East Java

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Over the last two years Australian Hearing Services has led a number of collabo-
rative projects in support of East Java’s fledgling hearing services. These have
been executed under the Australian-Indonesian Government’s Memorandum of
Understanding on Health and the Western Australia/East Java Sister State relation-
ship. The aims of the project are to: evaluate local needs for training and equipment;
assist by way of direct service delivery and training; and foster the self-determination
of local hearing services in East Java. Activities have included: “hands on” projects
by an audiologist, technician and teacher of the deaf; numerous training sessions
with parents, teachers, GP’s, ENT’s, hearing aid dispensers and allied professionals;
ongoing consultation with key East Java officials; and assessment of Australian
export potentials. These efforts recently culminated in the formation of the
Province’s first deafness foundation, under the patronage of the East Java
Governor’s wife Mrs Basofi Sudirman. Under this foundation, East Java has the
potential to become Indonesia’s premier region for provision of hearing services.

The Importance of Different Frequency Bands
To the Speech Perception of Cochlear Implantees

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It is well known that cochlear implant users exhibit a wide range of speech perception
ability. Understanding the reason for this variability may lead to improved speech
processors. This study investigates whether implantees rely on different areas of the
speech spectrum for speech cues, compared to normally hearing listeners, and
whether poor performers rely on different spectral areas than better performers. Six
subjects with the Mini System 22 implant and using the SPEAK strategy participated
in this experiment. Scores for monosyllabic words were obtained using the full
speech spectrum and with selected frequency bands removed from the subjects’
speech processor maps. The Articulation Index (AI) is a measure of the proportion of
speech information available to a listener, and the relative contribution to AI from

Aide
Mandy
(1) Aus
(2) Aus
(3) Nat
(4) Aus

Mult
Rod H
Clark
(1) Co
(2) Tr
(3) Co
(4) Tr
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