The Neuropsychology Department at Hawaii State Hospital

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The Neuropsychology Department at the Hawaii State Hospital has been an oasis for Hawaii’s brain injured population. It is one of the oldest neuropsychology services in the United States and one of only a handful of state funded programs. The department has been in existence since 1973 and has just celebrated its 25th anniversary. This article will briefly describe the past, present, and future of the Neuropsychology Department.

The department originated when psychologists Jim Craine and Howard Gudeman used monies from a federal grant for improving hospital services to evaluate brain damage in schizophrenic patients. Although the project was successful, the two psychologists were dismayed that there was no treatment for the patients diagnosed with brain damage. Thus with the assistance of a creative staff, they developed their own cognitive rehabilitation program. Today the Neuropsychology Department provides services to the entire state including neighbor islands. The department consists of two separate programs providing services in neuropsychological assessment and cognitive rehabilitation.

The assessment program is responsible for providing comprehensive neuropsychological evaluations and training graduate students in assessment techniques and case conceptualization. Currently, due to limited resources, the assessment program services primarily HSH inpatients, community health center patients, courts and correction referrals, and clients admitted into the neurotraining program.

Assessments have historically been based on the traditional Halstead-Reitan Neuropsychological Battery (HRNB). The HRNB is a fixed battery of tests that comprehensively examines a variety of brain functions such as attention, language, perceptual organization, memory, and problem solving. The battery has been found to be useful in identifying brain dysfunction and assisting in localizing brain lesions.

Dr. Craine has trained many of the local neuropsychologists in practice today through weekly case conceptualization seminars. His seminars have been an ongoing tradition for over 20 years. A former student of note is Charles Golden, a prominent neuropsychologist who later went on to develop the Luria-Nebraska Neuropsychological Battery.

Recently, there has been a shift in orientation with a strong influence of the Boston Process Approach. In comparison to the HRNB, the Process Approach is hypothesis driven and emphasizes the process of performances on testing versus quantitative test scores. In testing hypotheses a flexible battery is utilized to address different questions the clinician may have for a particular case. Despite changes in the evaluation process, the goal of providing Hawaii with quality assessments still remains.

The jewel of the Neuropsychology Department is the neurotraining program. Neurotraining is a comprehensive cognitive rehabilitation program that was developed in Hawaii by Drs. Craine and Gudeman, and neurotraining staff. The principles of neurotraining are based on Alexander Luria’s theory that the brain is plastic and can recover from injury by forming new connections. Through use of repetitive problem solving activities administered in one on one sessions several times a week, therapists have been successful in improving cognitive functions of many brain injured individuals in Hawaii. The principles and techniques of neurotraining are summarized in a book that was authored by the department.

Similar to the assessment laboratory, the neurotraining program is also undergoing changes. Historically, clients of the program have been serviced in one to one sessions with a neurotraining therapist or technician. However, due to limited resources and the great demand in the community, alternative methods of service delivery are now being pursued. One new method of treatment is through groups. Treatment groups are currently being held for socialization of community clients and for enhancing attentional skills of patient schizophrenics. In addition to groups, staff are also focusing on training other professionals in neurotraining to expand the resources in the community. Such programs are occurring on the Big Island and in the Department of Education on Oahu.

Currently, it is an exciting time for the Neuropsychology Department. Collaborations are being established with the University of Hawaii Department of Psychology to do research and with other agencies such as the Pacific Brain Injury Association to provide better services to the community. The department has also participated in organizing local conferences on traumatic brain injury to increase community awareness and education. Programs for previ-
Conference Notes

Acute Exacerbations of Chronic Bronchitis
Lecture by VP Ronald Grossman, Prof Medicine, Univ. of Toronto, Ontario, Canada: QMC, Fri am, July 31

Chronic Bronchitis:
Clinical dx: excessive cough, productive, lasting 3 mos to 2 years.
Risk factors: smoking, dust, air pollutants
Cost: 14 x 10^6 physician visits/yr in U.S.

Classification of Chronic Bronchitis:

Class I
Acute tracheobronchitis
Criteria or Risk Factors:
No underlyng disease
Pathogens:
Usually virus
Treatment:
1st: None unless sy’s persist
2nd: Amoxicillin or macrolide

Class II
Chronic bronchitis
Criteria or Risk Factors:
FEV₁ > 50%
† sputum vol or purulence
Pathogens:
H. Flu
M. Catarhalis
S. Pneumoniae
Treatment:
1st: Amoxicillin or Cipro (if H. Flu prevalence)
2nd: Cipro, Augmentin or macrolide, tetracycline, or trimet/sulfa

Class III
Chronic bronchitis complications
Criteria or Risk Factors:
FEV₁ < 50% † sputum vol & purulence; elderly, or comorbidity
Pathogens:
Same as Class II
Also K. pneumoniae
P. aeruginosa, other gm neg
Treatment:
1st: Cipro
2nd: 3rd gen cephalosporin, Augmentin, or Zithromax

Class IV
Chronic bronchial infection
Criteria or Risk Factors:
Same as Class III plus yr long production purulent sputum
Pathogens:
Same as Class III
Treatment:
1st: High dose Cipro or parenteral Cipro; Imipenem-clastatin or ceftazidime followed by high dose Cipro

References