VOICE QUALITY IN NEUROLOGICAL DISORDERS; PATHOPHYSIOLOGICAL CORRELATES

Thesis Submitted for the Partial Fulfillment of the
M.D. Degree in Phoniatrics

By

Nervana Gamal El-Din Hafez

M.B., B.Ch. M.Sc. (Phoniatrics)

Supervised by

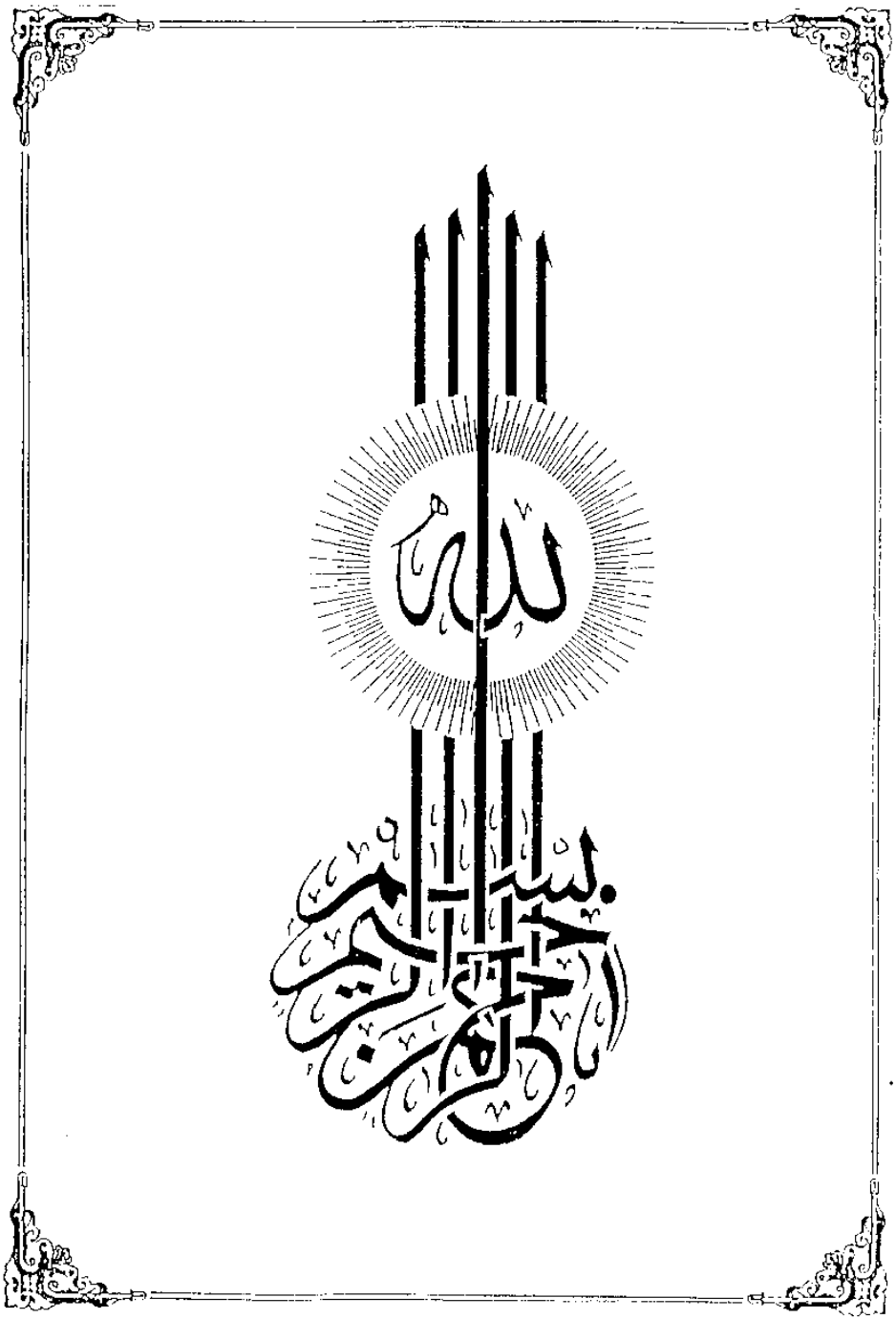
Prof. Dr. Mohamed Nasser Kotby
Professor and Head of the Phoniatric Unit and Head of E.N.T. Dept.
Faculty of Medicine-Ain Shams University

Prof. Dr. Mahmoud Moustafa
Professor of Neurology
Faculty of Medicine-Ain Shams University

Prof. Dr. Mahmoud Youssef Abou El-Ella
Professor of Phoniatrics
Faculty of Medicine-Ain Shams University

Dr. Taha Kamel Alloush
Assistant Professor of Neurology
Faculty of Medicine-Ain Shams University

Faculty of Medicine
Ain Shams University
1998



بسم الله الرحمن الرحيم

قالوا سبحانك لا علم لنا إلا ما علمتنا،
إنك أنت العليم الحكيم

صدق الله العظيم

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ABSTRACT

The speech of 103 individuals with different types of dysarthrophonia and peripheral nerve lesion were studied with Auditory Perceptual Assessment (APA), acoustic spectrographic analysis, nasometer, aerodynamics, Visipitch, neurological examination and nasofibroscopic examination. The abnormalities documented by APA analysis were able to differentiate between dysarthrophonia groups. The spectrographic analysis results were alteration in the time pattern, disturbed vowel duration, VOT and formant transition duration as well as frequency value disturbances reflecting various dysprosodic features.

Nasometer showed hypernasality associating most of the dysarthrophonia groups. In addition, aerodynamic studies were influenced by the type of breakdown in every group. Visipitch gave only significant results with bulbar and dyskinetic groups. A correlative study between APA parameters and other variables explained the breakdown and pathology that affect voice quality

Key words: Dysarthrophonia-Acoustic analysis-Voice quality