HUMAN POSTURAL REACTIONS - LESSONS FROM PURDON MARTIN

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This book is about static equilibrium - how we sit, rise, stand, turn and even lie- and about the many reflexes that are needed if the body is to retain its balance in the face of the downward pull of gravity”. Thus begins the introduction the book which has essentially been written as a tribute to J Purdon Martin. Purdon Martin was a neurologist, whose book “ the Basal Ganglia and Posture” was published in 1967. It documented the observations he had made regarding chronically disabled patients - mainly those with post-encephalitic parkinsonism, and the logical analysis of their postural deficits.

He classifies and describes the various normal postural reflexes; antigravity mechanisms, postural fixation, tilting reactions, tilting, righting and protective reactions etc.

This booklet ( 81 pages) is practical and easy to read and physiotherapists working with adults or children with neurological impairments will be able recognize their patients movement patterns in the descriptions of the various postural reactions, either from the text or the numerous drawings. Little information is given regarding rehabilitation.

However his underlying motor control model - the hierarchical model - with its concept of balance resulting from a series of hierarchically organized reflexes and reactions, while useful in the clinic to help identify the approximate level of injury and to help predict to what extent recovery will occur, has some significant limitations in terms of current motor control research. The hierarchical model led to the development of assessment tools that measured the presence or absence of reflexes and interventions that focused on inhibiting primitive and pathological reflexes and facilitating the emergence of normal equilibrium reactions. Current research indicates that balance can be viewed as a motor skill that emerges from the interaction of multiple systems that are organized to meet functional task goals and that are constrained by environmental context. Balance viewed as a motor skill suggests that like any skill, balance can improve with practice.(1)

In conclusion whilst this booklet may be of clinical interest, because it does not take into sufficient account the developments in the field of posture, balance and movement control, it has limited value in current therapeutic rehabilitation.

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REFERENCE.