

## Kinetic Control. The Management of Uncontrolled Movement

Mark Comerford, Sarah Mottram 2012. Elsevier Australia. ISBN number 978-0-7295-3907-4; 532 pages. Soft cover.

Mark Comerford and Sarah Mottram are the founders of the Kinetic Control approach which is based on the premise that 'uncontrolled movement' or 'movement faults' can predispose people to musculoskeletal pain and disability. Their research has been widely published in the musculoskeletal literature and this is their first book. The aim of the text is to provide a clinical approach to the assessment and correction of movement faults.

The terminology used in this book is specific to kinetic control. However a lack of prior knowledge of the terms will not prevent clinicians accessing the concepts because the notion of movement faults is consistent with other approaches familiar to physiotherapists (e.g. muscle imbalance, motor control dysfunction, deep muscles providing spinal stability etc). This book is well referenced and acknowledges the influences of leading authors in the development and support of the main concepts.

The book is divided into two sections with section one (chapters 1-4), introducing the concept of 'uncontrolled movement' along with methods for their identification and classification. Chapter two provides an overview of muscle function and physiology with a particular focus on the foundation knowledge required for the sections to follow. Chapter three covers the assessment and classification of 'uncontrolled movement' where the authors introduce an assessment template which helps the clinicians describe and record quality of movement. They term this the 'motor control rating system' and it is supported by a simple tick box assessment form which is completed as the clinician evaluates the ability of the patient to correctly and efficiently perform a specific movement. Each of the test movements has its own assessment form with details specific to the anatomical area. Chapter four provides a detailed approach to retraining strategies for movement faults. Complexities such as chronic pain, motivation and compliance are also discussed.

This first section is very comprehensive and the detailed text is enhanced by the frequent use of easily understood diagrams and tables. A particularly useful image describes where Kinetic Control fits amongst other musculoskeletal approaches so that clinicians can understand the relationship between Kinetic Control and other physiotherapy techniques and alternate therapies.

The second section is divided into five chapters under the following headings - the lumbopelvic region, the cervical spine, the thoracic spine, the shoulder girdle and the hip region. Each contains a brief introduction to the anatomical areas and then an elaboration on how to make a diagnosis of the commonly presenting dysfunctional movement pattern. The authors then present a vast range of specific motor control tests (eighty two in total) accompanied by photographs and the appropriate 'motor control rating' assessment form. While well constructed and sequential this can feel heavy going if you are trying to read it from cover to cover. However, having stated this, the detail provides the clinician with an excellent reference for repeated

access over time. A further enhancement of this section would be an accompanying CD ROM to demonstrate the dynamic qualities of the assessment methods and treatment regime. The addition of case studies would also be a helpful learning tool to assist readers to understand and apply their knowledge in the clinical setting. (e.g. treatment progressions, integration into functional activities, return to sport/ work etc).

Overall the authors achieve their aim by providing an extremely detailed text which is well thought out, assimilates other relevant research into an assessment and treatment approach with high face validity in the area of movement dysfunction and management of musculoskeletal pain. The accessibility, sequential layout and logical development of complex concepts to a relatively advanced level provides enough for this book to be a valuable reference and clinical guide for students, experienced clinicians and teachers alike.

Michelle Wong BPhy, MHPrac(Hons), MPNZ  
Physiotherapist

## Cortical Visual Impairment – An Approach to Assessment and Intervention

Christine Roman-Lantzy 2010 (Re-print). AFB Press New York. ISBN – 13 978-0-89128-829-9, ISBN – 10 0-89128-829-5. Softcover 185 pages. RRP: \$93.99

Dr Christine Roman-Lantzy's guide to assessment and intervention for children with Cortical Visual Impairment (CVI) is a resource for a range of health professions including Speech and language therapy, Occupational Therapy and Physiotherapy.

Roman's background includes working as a teacher for visually impaired students in public, private schools, home and hospital settings. This book offers a structured approach to guide the professional working with children with CVI. The book is well set out in six chapters and includes a number of resources which professionals are able to use.

Chapter one offers an historical overview and clear definition of CVI. This chapter clearly highlights to the reader the critical period in a child's visual development and the importance of early detection of CVI.

Chapter two discusses the causes of CVI, Roman provides examples from children she has worked with to link the information.

Chapter three presents the ten visual behaviours most commonly associated with CVI. Roman states that "Generally the greater severity of CVI the greater number of behaviours will be evident." However she reassures that these behaviours can change and improve with appropriate intervention.

Within chapter four Roman offers a thoughtful and family centred approach highlighting the parents as experts in providing information to therapists / and or teachers regarding their child's visual behaviours. The chapter offers personal accounts from parents caring for children with CVI which are thought provoking and highlights the need for therapists / teachers to have knowledge / understanding of CVI. Within this chapter there is basic information regarding interviewing

families and listening to concerns, this information would be valuable for undergraduate therapists working in client centred practice.

Chapter five discusses the author's approach to functional visual assessments based on a framework called the CVI range. This is a two part assessment protocol that Roman has developed to establish the level of visual functioning. The initial phase of the assessment considers the extent to which the child is affected by each individual characteristic of CVI. The second phase focuses upon the extent each behaviour impacts upon the child's ability to use functional vision. The author's method for assessment is thorough and systematic, information is gathered by: interviews (i.e. with parents / teachers), observations and direct evaluation. There are case studies which are helpful in illustrating the application of the CVI range. There is a CVI resolution chart which offers a summary of the data obtained from the assessment process.

Chapter six considers in detail program planning and intervention. Roman details phases I to III of CVI, this indicates where the child is in terms of CVI resolution and offers information regarding goal setting in each phase. The three phases range from 'building visual behaviour' to the 'resolution of remaining CVI characteristics'. Useful examples are given to assist the team to plan and implement a program which can be incorporated in everyday activities with appropriate CVI adaptations. Roman suggests that in order for intervention to be most effective it should be within the child's daily routine,

As an Occupational Therapist working within a regional brain injury service I would find this book a useful reference. The resources and assessment tools would require further study. This book highlights the need for professionals working with children with brain injury to be aware of the features of CVI so this can be identified early allowing thorough assessment and intervention within a family centred approach.

*Sarah Booker*  
*Occupational Therapist NZROT*  
*Wilson Centre*  
*Child Rehabilitation Service*  
*Auckland*

## Improving Hand Function in Children with Cerebral Palsy: theory, evidence and intervention Ann- Christin Eliasson & Patricia A. Burtner(eds)

2008 Mac Keith Press 30 Furnival Street, London EC4A 1J. ISBN: 978-1-898683-53-7. Hardcover; pages 442. RRP: \$ 164.00

.....  
This book is a continuation of the well-respected Clinics in Developmental Medicine series. It has been developed to provide a comprehensive review of the upper extremity neuro-pathophysiology, development of hand function and an overview of contemporary intervention for children with cerebral palsy.

The text is divided into 26 chapters written by a variety of academic and clinical professionals, primarily within the field

of occupational therapy from Australasia, North America and Europe. Each chapter is well researched, using credible literature to support presented information.

The first half of the book reviews the basics; neuroscience, upper extremity anatomy, spasticity, neurodevelopment and motor learning. These chapters provide a good overview for most paediatric physiotherapists but would also be beneficial for recently graduated occupational therapists working in paediatrics. Although the book is focused on therapists treating children with the diagnosis of cerebral palsy, the information in these initial chapters can be translated to other neurological impairments. They have included useful diagrams and pictures that help clarify information presented, especially beneficial within the neuroscience chapters.

The end of the book focuses on current medical management, therapy assessments and interventions. The therapy sections are primarily occupational therapy focused, but neurodevelopmental therapist and paediatric physiotherapist could incorporate some of the principles and tools discussed, to their clinical practice.

Unfortunately, the chapters dedicated to medical intervention, such as surgical correction and Botulinum Toxin A injections are aimed at novice therapists and families. Although these chapters provide a respectable summary, they could have included new advancements within this area. I recognise that these interventions may not be available in all centres but it is important for therapists to be aware of all potential treatments on offer.

The therapy based chapters are directed towards the contemporary practicing philosophy of family and child goal focused intervention and the child's ability to participate, rather than the traditional impairment based treatments.

In particular, chapter 18 is dedicated to goal setting and highlights tools that can be used across all disciplines. At the end of the chapter they present case studies to demonstrate their application.

Chapter 12 is designed to facilitate the therapist to evaluate assessment tools. With the ongoing addition of new assessments and the emphasis of providing evidence to service providers, it is important for therapists to be able to choose the most appropriate assessment. Although the chapter is dedicated to upper limb assessments, key principles can be applied to assessments in other fields.

In summary, the majority of the information in this book is relevant to paediatric physiotherapy practice and would be especially useful to physiotherapists working in isolation with children with cerebral palsy.

*Louise Pearce, BHSc (Physiotherapy)*  
*Paediatric Physiotherapist*  
*Starship Children's Health*  
*Auckland District Health Board*