Improving Hand Function in Children with Cerebral Palsy

Eliasson, Ann-Christin


Table of Contents

FOREWORD Hans Forssberg

INTRODUCTION Ann-Christin Eliasson and Patricia A. Burtner

1. BRAIN PLASTICITY IN DEVELOPMENT AND DISEASE Hans Forssberg
2. CORTICAL CONTROL OF HAND FUNCTION Johan Kuhtz-Buschbeck and Stephan Ulmer
3. NEUROPSYCHOLOGY OF MOVEMENT SEQUENCE LEARNING Fredrik Ullén
4. NEUROLOGICAL CLASSIFICATION AND NEURORADIOLOGY OF CEREBRAL PALSY Ingeborg Krägeloh-Mann and Martin Staudt
5. NORMAL ANATOMY OF THE UPPER EXTREMITY Beth M. Jones
6. MUSCLE ALTERATIONS DUE TO SPASTICITY Eva Pontén
7. POSTURAL CONTROL FOR REACHING AND HAND SKILLS
   1. Mindy F. Levin and Heidi Sveistrup
   8. VISUAL IMPAIRMENT AND CONSEQUENCES FOR HAND FUNCTION Eugenio Mercuri, Andrea Guzzetta and Giovanni Cioni
   9. THE ROLE OF SENSATION FOR HAND FUNCTION IN CHILDREN WITH CEREBRAL PALSY Annette Majnemer, Daniel Bourbonnais and Victor Frak
10. NORMAL AND IMPAIRED DEVELOPMENT OF THE UPPER LIMB Jeanne R. Charles
11. Bimanual Coordination in Children with Hemiplegic Cerebral Palsy Andrew M. Gordon and Bert Steenbergen
12. CHOOSING AND USING ASSESSMENTS OF HAND FUNCTION Lena Krumlinde-Sundholm
13. ORTHOPAEDIC INTERVENTION IN THE UPPER EXTREMITY IN CHILDREN WITH CEREBRAL PALSY: MUSCULOSKELETAL SURGERY L. Andrew Koman, Zhongyu Li and Beth Paterson Smith
14. ORTHOPAEDIC INTERVENTION IN THE MANAGEMENT OF CEREBRAL PALSY: BOTULINUM TOXINS L. Andrew Koman, Zhongyu Li and Beth Paterson Smith
15. THERAPEUTIC INTERVENTIONS AT THE BODY STRUCTURE AND FUNCTION LEVEL TO SUPPORT CHILDREN’S UPPER EXTREMITY FUNCTION Patricia A. Burtner and Janet L. Poole
16. MOTOR LEARNING IN CHILDREN WITH CEREBRAL PALSY: IMPLICATIONS FOR REHABILITATION Shailesh S. Kantak, Katherine J. Sullivan and Patricia A. Burtner
17. A COGNITIVE PERSPECTIVE ON INTERVENTION Angela A. Mardich, Helene J. Polatajko and Ann Zilberbrant
18. GOAL-ORIENTED TRAINING OF DAILY ACTIVITIES: A MODEL FOR INTERVENTION Ann-Christin Eliasson and Birgit Rößblad
19. VOLITION: CHILD-ORIENTED INTERVENTION FOR THE UPPER EXTREMITY Susan M. Cahill and Gary Kielhofner
20. CONSTRAINT-INDUCED MOVEMENT THERAPY FOR CHILDREN WITH HEMIPLEGIA, Ann-Christin Eliasson and Andrew M. Gordon
21. SELF CARE AND HAND FUNCTION Anne Henderson and Ann-Christin Eliasson
22. WRITTEN COMMUNICATION: CLINICAL DECISION-MAKING FOR HANDWRITING IN CHILDREN WITH CEREBRAL PALSY Sonya Murchland, Alison Lane and Jenny Ziviani
23. LEARNING TO PLAY: PROMOTING SKILLS AND QUALITY OF LIFE IN INDIVIDUALS WITH CEREBRAL PALSY Ema Imperatore Blanche and Susan Hirsch Knox
24. ASSISTIVE TECHNOLOGY DEVICES IN COMPUTER ACTIVITIES Helene Lidström and Maria Borgestig
25. PARTICIPATION: THE ULTIMATE CHALLENGE Jenny Ziviani and Margaret Wallen
26. THE EVIDENCE BASE FOR UPPER-EXTREMITY INTERVENTION FOR CHILDREN WITH CEREBRAL PALSY Christine Imms

APPENDIX: ASSESSMENTS USED TO MEASURE HAND FUNCTION, ACTIVITIES AND PARTICIPATION OF CHILDREN WITH CEREBRAL PALSY Heidi Sanders