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Altri autori (Persone)	EliassonAnn-Christin <1950-> BurtnerPatricia A
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Nota di contenuto	CONTENTS; AUTHORS'APPOINTMENTS; FOREWORD; INTRODUCTION; References; 1 BRAIN PLASTICITY IN DEVELOPMENT AND DISEASE Hans Forsberg; Introduction; Neuroimaging methods used to study brain plasticity; Plasticity in the developing brain; Plasticity in the somatosensory system; Plasticity in the motor system; Learning of new motor skills; Plasticity of the young damaged brain; Clinical considerations; References; 2 CORTICAL CONTROL OF HAND FUNCTION Johann Kuhtz-Buschbeck and Stephan Ulmer; The motor control system - an overview; Neural control of hand movements; Glossary; References 3 NEUROPSYCHOLOGY OF MOVEMENT SEQUENCE LEARNING Fredrik Ullen1 Introduction; 2 Common paradigms in movement sequence learning research; 3 Learning the ordinal structure of a movement sequence; 4 Learning the temporal structure of a movement sequence; 5 Developmental aspects of movement sequence learning; 6 Individual differences in movement sequence learning ability; 7 Conclusion; References; 4 NEUROLOGICAL CLASSIFICATION AND NEURORADIOLOGY OF CEREBRAL PALSY Ingeborg Krageloh-Mann and Martin Staudt; I

Neurological classification of cerebral palsy

II Neuroradiology of cerebral palsy and upper extremity

dysfunctionReferences; 5 NORMAL ANATOMY OF THE UPPER

EXTREMITYBeth Moody Jones; Introduction; Proximal joints and

muscles; Distal joints and muscles; Innervation of the upper limb;

References; 6 MUSCLE ALTERATIONS DUE TO SPASTICITY Eva Ponten;

Hypertonia in childhood; Muscle architecture; Decreased passive

extensibility; Adhesions between muscles and muscle fibres;

Sarcomeres in series; Intracellular alterations; Myosins; Summary;

References; 7 POSTURAL CONTROL FOR REACHING AND HAND SKILLS

Mindy F. Levin and Heidi Sveistrup

Postural controlArm and trunk movement patterns during reaching and

grasping in typically developing children; Arm and trunk movement

patterns during reaching and grasping in children with CP; Interventions

to improve reaching and grasping; Conclusions; References; 8 VISUAL

IMPAIRMENT AND CONSEQUENCES FOR HAND FUNCTION Eugenio

Mercuri, Andrea Guzzetta and Giovanni Cioni; Introduction; Visual

disorders in infants and children with brain lesions and cerebral palsy;

Vision and manipulation in normal development and cerebral palsy;

Visual ventral/dorsal stream and motor action

Visual ventral/dorsal stream disorders in childrenReferences; 9 THE

ROLE OF SENSATION FOR HAND FUNCTION IN CHILDREN WITH

CEREBRAL PALSY Annette Majnemer, Daniel Bourbonnais and Victor

Frak; Importance of sensation for refined hand function; Relationship

between sensation and hand function in children with cerebral palsy;

Conclusions; References; 10 TYPICAL AND ATYPICAL DEVELOPMENT OF

THE UPPER LIMB IN CHILDREN Jeanne R. Charles; Introduction; Systems

influencing functional development of the upper extremity; Atypical

development due to prenatal/perinatal CNS damage; Conclusion;

References

11 BIMANUAL COORDINATION IN CHILDREN WITH HEMIPLEGIC

CEREBRAL PALSY Andrew M. Gordon and Bert Steenbergen

Sommario/riassunto

An essential guide to assessing and understanding hand function for children with cerebral palsy. Also covering interventions and treatment approaches, especially for clinicians and therapists.