Foreword
Dr Arthur Paynter

Acknowledgements

1 Identifying Signs of Neuromotor Immaturity in Children and Adults

1.1 Introduction 1
1.2 How to Use This Manual 2
1.3 Overview 3
1.4 Relationship Between Neuromotor Immaturity and Learning Outcomes 4
   Literature review 4
1.5 Neuromotor Immaturity in Adolescents 6
1.6 Relevance of the INPP Screening Test to Health Practitioners 8
1.7 What is the INPP Method? 8
   Why assess posture and balance? 9
   Why carry out assessments for balance? 9
   What is the significance of static balance and dynamic balance to learning? 10
   What is the significance of postural control to learning? 10
   What is the link between primitive reflexes, balance and postural control? 11
1.8 How Does the Vestibular System Work? 11
1.9 Primitive Reflexes 12
   Why have these four reflexes been selected for evaluation? 12
1.10 What Evidence is There that Intervention in the Form of Movement Programmes Aimed at the Level of Primitive Reflexes Improves Reflex Status and Educational Outcomes? 18
1.11 What was Known About Exercises to Inhibit Primitive Reflexes? 18
   When was the INPP Method Developed? What has been Your Personal Experience Since then? 19
1.12 What is the Difference Between the INPP Method, Sensory Integration (SI), Vojta Therapy, Bobath Therapy and Others Working with Primitive Reflexes? What are the Criteria for Referral to a Particular Therapy? 20
   The INPP method 20
   Sensory Integration (SI) therapy 21
   Vojta therapy 22
   Bobath therapy 26
1.13 What are the Top Five Medical Diagnoses Where Referral to INPP Should Routinely be Considered After Checking the Reflexes by Clinicians? 27
1.14 Screening Tests 27
   How to use the screening test 28
References 28
2 Screening Test for Use with Children 32
  2.1 General Instructions 32
  2.2 Scoring 32
  2.3 Tests 33
    The Romberg test 34
    One-leg stand or Unipedal Stance Test (UPST) 37
    Tests for ‘soft signs’ of neurological dysfunction: The Tandem and Fog walks 39
    The Tandem walk 40
    The Fog walk (1963) (walking on the outsides of the feet) 42
    Finger and thumb opposition test 44
  2.4 Tests for Primitive Reflexes 46
    Asymmetrical Tonic Neck Reflex (ATNR) 46
    Test procedure: Ayres quadruped test for the ATNR 47
    Adapted Hoff–Schilder test for the ATNR (from seven years of age) 48
    The Symmetrical Tonic Neck Reflex (STNR) 50
    Tonic Labyrinthine Reflex (TLR): Erect test 52
    The Moro reflex 54
  2.5 Sample Score Sheets 56
  2.6 Sample Observation Sheets 57
  2.7 Interpreting the Scores 58
    Children 58

References 59

3 Neuromotor Immaturity in Adults 61
  3.1 The Role of the Vestibular System and Its Connections 61
  3.2 Historical Background to Links Between Vestibular–Cerebellar Dysfunction and Anxiety, Agoraphobia and Panic Disorder 64
  3.3 Vestibular Dysfunction: Cause or Effect? 68
  3.4 Rationale for a Somatogenic/Psychosomatic Basis to Some Anxiety Disorders 68
  3.5 Postural Righting Reactions 71
    Labyrinthine Head Righting Reflexes (LHRRs) 71
  3.6 The Moro Reflex: A Trigger for Panic? 72
  3.7 How to Use the INPP Screening Test 74
  3.8 The INPP Adult Screening Questionnaire 76
  3.9 Interpreting the INPP Adult Screening Questionnaire 79

References 80
4 INPP Screening Test for Signs of Neuromotor Immaturity in Adults

4.1 General Instructions
4.2 Scoring
4.3 Screening Tests for Use with Adults
4.4 Tests for Balance and ‘Soft Signs’ of Neurological Dysfunction (ND)
4.5 Tests for Balance and Proprioception
   The Romberg test
   The Mann test (advanced Romberg test)
   The Tandem walk
   The Fog walk (1963) (walking on the outsides of the feet)
4.6 Tests for Primitive Reflexes
   Asymmetrical Tonic Neck Reflex (ATNR)
   Ayres quadruped test for the ATNR
   Asymmetrical Tonic Neck Reflex adapted Hoff–Schilder (erect) test
   The Symmetrical Tonic Neck Reflex (STNR)
   Tonic Labyrinthine Reflex (TLR): Erect test
   Moro reflex
   Erect (drag) test for the Moro reflex
4.7 Adult screening test
4.8 Interpreting the scores
References

Resources

Index