

JOINT EVENT

24th International Conference on PSYCHIATRY & PSYCHOSOMATIC MEDICINE
&2nd International Congress on FORENSIC SCIENCE AND PSYCHOLOGY

October 12-14, 2017 London, UK

Mirror mirror on the ward: Mirror box therapy for dissociative motor disorder in a child

Matthew Rinaldi, Daniel Ilzarbe and Marinos Kyriakopoulos

King's College London, London, UK

Bethlem Royal Hospital, UK

Statement of the Problem: Dissociative motor disorder (DMD) is a clinical condition of medically unexplained symptoms of altered voluntary motor function. Evidence for interventions is limited in children, focusing on behavioural management and physiotherapy. We present the first case of a child with DMD affecting one hand and Mirror Box Therapy (MBT) added to her treatment.

Methodology & Theoretical Orientation: The brain's tendency to recognize visual feedback before proprioceptive or somatic feedback and neuronal plasticity suggests that MBT may challenge the motor unawareness of DMD. The mirror box was constructed so that the unaffected hand only and the mirror image of it were visible to the patient, giving the visual impression that both hands moved symmetrically. A weekly programme was designed that would escalate through a hierarchy of perceived difficulty of a range of hand movements. The Brief Illness Perception Questionnaire (BIPQ) and Perceived Physical Ability Scale (PPAS) were completed pre-and post-intervention as was passive and active hand extension. Qualitative feedback was collected from the patient.

Findings: The BIPQ score globally improved (53 to 44 out of 70) in how severely the hand affected her life and her level of worrying. She continued attributing symptoms completely to biological causes without differences in PPAS results (16 to 17 out of 24). The range of passive extension of hand joints improved, but active extension reduced due to secondary contractures which required splint intervention. Qualitatively, the young person was initially enthusiastic but later fed back that the treatment was "unhelpful".

Conclusion & Significance: MBT is a well-tolerated intervention in an under-researched area of paediatric mental health. Our method can be used alongside treatment-as-usual for future research in DMD populations where MBT is employed earlier in the disease process. This intervention may validate a biological understanding of the condition

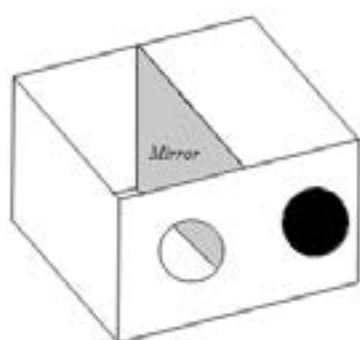


Figure 1: Diagram of the mirror box

Movement	Age appropriate instruction
1 Passive	Look at hands to the mirror box
2 Prescribed voluntary hand	Dropping a ball of string on the floor
3 Wrist flexion-extension	Turning a water tap
4 Palmar grip	Using a pen
5 Dynamic palmar grip / extending IP joints	Squeezing/rolling a stress ball
6 Extending IP joints	Pushing out the hand
7 Move individual fingers	Moving the pen along with a piece of paper
8 Finger thumb opposition	Covering fingers, popping bubblewrap
9 Palmar grip / extending IP joints	Using scissors
10 Extending IP joints	Opening hand to let a bird out
11 Extending IP joints with heightened anxiety	Opening hand to let spider out
12 Extending IP joints with resistance	Opening hand against an elastic band
13 Abducting fingers	Turning a rotation of the line
14 Above exercises with distraction	Standing on a chair or balancing on one leg

Table 1: Hierarchy of exercises for functionally affected hands using MBT

Biography

Matthew Rinaldi is a core Trainee Psychiatrist on the Maudsley training programme. He has interests in psychosomatic conditions, the psychotherapeutic understanding and multi-disciplinary management of them. A trainee who works for bottom-up service improvement, his work stems from under-researched problems that he encounters in clinical practice.

matthew.rinaldi@slam.nhs.uk