**MULTIPLE CHOICE QUESTIONS**

**THE EFFECT OF NEOPRENE THUMB ABDUCTION SPLINTS ON UPPER LIMB FUNCTION IN CHILDREN WITH CEREBRAL PALSY**

1 A lack of disassociation between the movement elements of the upper limb of children with CP affects hand use when

1. the hand is positioned correctly but is weak
2. movement in the shoulder girdle affects movement in the forearm and wrist.
3. compensatory patterns of movement in the limbs are used,
4. the child substitutes for the pattern which they are unable to carry out
5. movement of the wrist and hand occur separately

Correct answer b c d

2. Deformities of thumb that impede hand function include

1. narrowed web space
2. thumb adduction and flexion resulting in a thumb -in-palm deformity.
3. compensatory patterns of movement,
4. hyper mobility in distal interphalangeal joint of the thumb
5. hyper mobility in the metacarpophalangeal joint of the thumb

Correct answer b d e

3. Research evidence to support the use of splinting in the hand of the CP child includes

1. short-term benefit on the quality of movement in some children
2. . the thumb abductors splint as the most effective
3. no clear effect on the improvement in quality of movement,
4. improved ability to function in their everyday lives
5. is conflicting

Correct answer a c e

4 Hand splints are used with children with CP to

1. stretch and lengthen muscles
2. prevent contractures or to regain range of motion
3. compensate for lack of movement
4. change the spacticity in the thumb
5. stabilize and protect the joints

Correct answer a b e

5. Splints used with children with CP may be categorized as

1. non-functional hand splints that fixate the hand or upper limb in a certain position
2. hard hand splints to support the joints.
3. functional hand splints, prescribed to be worn during the performance of activities
4. tight hand splints so they support joints
5. soft hand splints for maintenance of range

Correct answer a c

6. Soft neoprene splints for a thumb-in-palm

1. maintain the thumb in an abducted or opposed position,
2. allow the child to substitute for the pattern they are unable to carry out
3. allow for better hand function and grasps
4. are recommended due to ease of use and comfort
5. should be avoided as there is no evidence that they are effective

Correct answer a c d

7 Neoprene splints are thought to be effective as

1. prevent shortening of muscle fibers and remodeling of muscle connective tissue
2. provide prolonged stretch of the adductor muscles of the thumb
3. have an temporary inhibitory effect on spasticity.
4. provides neutral warmth to the hand[7](#_ENREF_7),
5. fixate the thumb into abduction

Correct answer a b c d

8 The difference in the QUEST scores between the intervention and control group

1. were statistically significant
2. showed no relevant clinical change for dissociation of movement between the groups.
3. showed splinting in CP children id ineffective
4. found bigger change in the control group
5. showed moderate effect size in the change in scores from the initial to the final assessment for weight bearing in the intervention group

Correct answer a b e

9 The results for protective extension were not unexpected since.

1. in a child with cerebral palsy righting reactions often take longer to initiate.
2. protective extension is a postural reflex,
3. the hand was more fisted
4. with the splint on the thumb is positioned out of the palm
5. as this expected was expected to improve significantly

Correct answer a b d

10 A relevant treatment effect was found in the effect sizes within the intervention group for grasps with the splint on as

1. a more functional grasps with radial palmer or digital pronate grasp was used.
2. grasp is not possible without the splint on
3. change in grasp is not related to wearing the splint
4. this subtest includes pinches and pencil grasp and with the splint on the child was able to grasp a greater variety of objects
5. this supports findings that soft splinting of the thumb has some positive effect

Correct answer a d e