

THE WILBARGER PROTOCOL FOR SENSORY DEFENSIVENESS

Deep Pressure and Proprioceptive Technique (DPPT)

(Please do not reproduce and distribute this handout. It is to be used only by someone who has received face to face instruction from a trained occupational therapist.)

We have two ways of responding to sensory input. The higher, more mature response is called discrimination. Discrimination allows us to immediately interpret what the stimuli is and whether or not we need to respond to it. The more basic, survival-oriented response is a protective fight, flight, or fright reaction. Sensory defensiveness is an over-activation of our protective senses. It is a tendency to react negatively or with alarm to sensation that is generally considered harmless or non-irritating. Stimuli in the environment are often interpreted as uncomfortable or threatening. Common symptoms may include over-sensitivity or over-reaction to light or unexpected touch, sudden movement, high-pitched noises, bright lights and/or certain smells.

Sensory defensiveness results in varying degrees of stress and anxiety with each child. The child with sensory defensiveness may perceive the world as dangerous, alarming or at the very least irritating. Children with sensory defensiveness can be described as sometimes over-active, emotional or sensory-seeking. Learned patterns and habits are often developed around avoiding disrupting sensory events or seeking out sensation that might restore comfort. When sensory defensiveness dominates a child's behavior, parents or caregivers may find it increasingly difficult to manage the child. For example, the child may frequently hit or bite other children at school, throw temper tantrums during outings or destroy belongings.

Implementation of the Wilbarger Deep Pressure and Proprioceptive Technique (DPPT), sometimes referred to as "The Brushing Program", in conjunction with a sensory diet, is recommended to help decrease sensory defensiveness. This technique was developed by Pat Wilbarger, M.Ed., OTR in



order to reduce an individual's over-reactivity to harmless sensations. Because the DPPT decreases a child's hypersensitivities, it also frequently helps a child modulate/regulate their emotional response to the environment and maintain a more calm, organized, less irritable and reactive state. Anyone using the DPPT must be trained and monitored by a qualified occupational therapist. The DPPT uses a specific type of plastic molded brush to provide deep pressure to the arms, hands, back and legs. This technique can be done over the clothes. The "brushing" is followed by gentle joint compressions to each of the major joints. The whole technique, from start to finish should take no more than 2-3 minutes. Optimally, this technique should be done every 2 hours (at least for the first 2 weeks). Although the mechanism by which this technique works is not yet completely understood many people have reported positive effects.

DPPT

- 1. Use only the brush provided by your child's therapist. Be sure to use the solid side of the brush. Test the brush on your own skin each day to make sure that it has not become scratchy.
- 2. Hold the brush horizontally to provide input. Brushing is most effective when done on bare skin, however it can be done over clothing and the brush can be held vertically over clothing to provide stronger input.
- 3. Always maintain the brush in physical contact with the child. Each time you pick up the brush you are alerting the child's nervous system and the goal of the DPPT is to calm and organize.
- 4. Apply firm, consistent pressure on the arms, hands, back, legs and feet.
- 5. Do NOT brush face or stomach.
- 6. Always follow with joint compressions.
- 7. Repeat the procedure every 90 minutes to two hours (at least six times a day) for the first 2-3 weeks. It is often best to tie the DPPT to daily routines to help you remember. Do the DPPT when getting your child dressed in the morning and undressed in the evening. Do it



with each mealtime. One more time in midafternoon will bring it to six. If your child naps, do it before naptime. If your child is in school or daycare, you may want to explore the possibility of the teachers doing it during the day or doing this intense phase during vacation or holidays. For the child still in diapers, do with each diaper change.

8. Your child's therapist will help you in determining a schedule for fading the DPPT.

PROCEDURE

- 1. Apply firm pressure to one arm and hand, covering each area 2-3 times, brushing the palms of the hands several times. Without lifting the brush or changing pressure, move to the child's back and then the other arm. Smoothly transfer to the child's leg and complete both legs, including feet. If the child is very ticklish, omit bottoms of feet. (Procedure can begin with legs and move upward.)
- 2. Brushing must be followed by joint compressions, which are repeated 10 times. Joints need to be kept in good alignment. The order of joint compressions does not matter.
 - a. Wrist: Hold hand in a handshake position, stabilize elbow and press hand back towards the elbow.
 - b. Elbow: Hold arm above and below elbow joint.
 - c. Shoulder: Place one hand on top of shoulder and one hand under elbow. Press down on shoulder.
 - d. Hips: In a seated position, place one hand behind hip and one hand on front of knee, press knee back into hip.
 - e. Knee to foot: Press down on knees through the ankles to floor.
- 3. With very young children, a., b., and c. can be combined and input done through extended arm with pressure applied through the palm of the hand into the child's shoulder. Likewise, d. and e. can be combined with pressure applied from the bottom of the foot into the hip. In



a child resistant to the joint compressions, jumping can be substituted for the leg compressions.

4. You may find it helpful to distract your child by singing or giving them a fidget or mouth toy. If your child is very resistant, talk to your child's therapist.

Please call your therapist if you have any questions or see any significant behavioral changes in your child.

(Please do not reproduce and distribute this handout. It is to be used only by someone who has received face-to-face instruction from a trained occupational therapist.)