Stability and Midline Orientation in a Baby “Bowl”
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CASE HISTORY: Baby girl Stephanie is a six-month-old infant who was delivered at 25 weeks gestation. She has been diagnosed as having severe periventricular leukomalacia and parents have been told that Spastic Quadriplegic Cerebral Palsy is very likely. Stephanie has also been shunted.

CLINICAL CONSIDERATIONS: Stephanie exhibits high extensor tone with a strong ATNR towards the right and a severe startle reflex. She is extreme irritable. Mom is the only person who can calm her, usually by picking her up and walking and rocking her. Her head is elongated front to back and this makes it almost impossible for Stephanie to hold her head in midline in supine. This results in a strong ATNR posture which makes it impossible to get hands to midline. Stephanie is extremely unstable in supine and startles easily at the least sound or movement of her body.

TREATMENT APPROACH: The baby “bowl” is carved out of four inch foam with pieces/wedges added to maximize the baby’s posture. Stephanie is placed on the slab of foam and an outline is marked on the foam of the baby’s body and head, with her head in midline. This is then carved out to the desired depth to accommodate her in a posture of hip flexion and capital flexion. Foam pieces are then added to maintain Stephanie’s hips and knees in, minimally, 90° of flexion. I often provide increased flexion of the hips and knees and place these muscle groups in inner ranges to lessen the effects of extension in particular.

Wedges are then added to maintain the arms/shoulders in slight forward flexion and the head in midline. Care is taken to maintain the head in the desired position. The head posture is very important as too much capital extension does not inhibit the extension and too much capital flexion can impede respiration and swallowing.

A wedge is placed under the upper section of the “bowl” to raise the head and shoulders of the baby, which tends to lessen the effect of the tonic labyrinthine reflex and the effects of gravity.

The parent is instructed to use the “bowl” as much as the baby will tolerate it as long as there are responsible adults present. The baby should not be left alone in the “bowl” and should not be put in the crib and left alone. The “bowl” should be covered in a thin, preferably stretchy, baby blanket or sheet which will keep it clean and make it comfortable for baby. Parents are advised to watch for overheating of the baby although I have only observed this once in a baby who had lost the ability to control its own temperature as a result of damage sustained at or subsequent to its birth.

The “bowl” allows the parent to hold the baby without actually holding her in their arms and it can serve to assist in removing an irritable baby from the constant shelter of the mother’s arms. The parent can feed the baby in this while maintaining good midline control and it can be propped even higher to lessen the effects of gravity on the baby. The baby in the “bowl”, can be placed on the kitchen table or counter while the parent works, or on the floor or couch or chair where it can be constantly monitored. If the baby “bowl” is being used in the hospital, care must be taken not to elevate the baby too much in the isolette and also that the positional needs of the medical staff are observed.

OUTCOME: The end result is usually tolerance, inhibition of abnormal posturing and reflex activity and good maintenance of midline orientation. Most babies settle down when placed in the “bowl” and often fall asleep, a good indication of your success is that feeding often improves due to the improved head posture. The baby “bowl” really can make a tremendous difference to a baby in terms of it’s tone, posture and irritability. Usually you can see the changes immediately or when the baby is placed in it in a familiar environment, e.g. at home, if it has been made for the baby anywhere other than at home. The most visible functional difference is often that the baby has hands to midline and plays with its hands or gets them to its mouth. This was the result obtained with Stephanie. Her tone was more manageable and she was influenced less by her primitive reflexes which had been so destructive. Mom was gradually able to wean her from her arms and other family members were then able to comfort her.

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