



“Making the Difference With Babies”

Concepts & Guidelines *for* Baby Treatment

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About the Author

Mary B. Quinton, MCSP, MBE, began her professional career as a physiotherapist in England in 1935. During World War II she was dispatched to Malta, to assist in dealing with the polio epidemic that struck hundreds of children under the age of 3. She was instrumental in developing the first Physiotherapy Department on the island of Malta. After the war Ms. Quinton continued her work in general medical surgical

rehabilitation, orthopedics, and polio in England. In 1957 Mary took the Neurodevelopmental Treatment course given by Berta Bobath. It was there that she met Dr. Elsbeth Köng, a pediatrician from Bern, Switzerland. In 1959 Mary took her second course with Berta Bobath, and then moved to Bern to begin working with Dr. Köng. Together they began training therapists in Switzerland with the Neurodevelopmental (Bobath) Treatment Approach. The emphasis of their work was on babies, to see whether it was possible to prevent the disabling deformities of cerebral palsy that were seen later. Since those early days of pioneering baby treatment, Mary Quinton, with the support and leadership of Dr. Köng, brought the concept of effective early treatment to thousands of therapists and physicians around the world. Her work has substantially changed the climate and understanding of the importance of early treatment and she has demonstrated over and over again her ability to make profound changes in the quality of life for babies at risk and even in those with abnormal movement patterns. In August of 2000 she was awarded the prestigious honor of the Sunshine Medal, awarded by Dr. Helbrügge of Germany. Her unique expression of concepts and her intuitive skills in treating babies made her one of the most influential therapists of the twentieth century. In this book Mary Quinton clarifies her ideas and the way in which she has translated those clinical concepts into effective physical handling to improve the lives of babies and their families.

THE IMPORTANCE OF THE DEVELOPING RIGHTING REACTIONS

The righting reactions are chain reactions, described extensively by Peiper, that balance the body in response to the influence of gravity and the body's contact with the supporting surface. Their influence strengthens gradually as the baby matures, and they affect the whole of development, especially influencing the baby between 5 and 10 months of age.

The righting reactions originate in the midbrain. They are active, automatic reactions that maintain the normal position of the head in relation to the body in space. They influence us throughout life, in such abilities as the head control in relation to the body that is necessary in order to get up from the floor. The chain of righting reactions maintains the normal position of the head in an alignment perpendicular to the base of support. The ability to maintain and to regain, if lost, this normal alignment of the head and neck with the trunk and limbs is one of the most important features of human development. This smooth quality of movement is only possible through the development of rotation around the body axis; for example, permitting the positional changes between the shoulder girdle and the pelvic girdle in either direction. All our movements are in reality rotational, and even our joint surfaces are obliquely oriented, as pointed out by Dr. Kabat.

The righting reactions are found in a baby from birth throughout the first year of life, but they are most active during the 5 to 7 months period of development. They become gradually integrated with the equilibrium reactions, which are more active at 10 to 12 months. Voluntary movements are based upon and develop from these automatic reactions. Normal postural tone is required for the development of the righting reactions.

The righting reactions include: The neck righting reaction on the head, the head righting on the body, body righting on the head, visual righting and body righting on the body. None of these are seen in isolation, except in animal experiments done long ago by Magnus. All righting reactions interact and inter-relate with each other, as well as with the equilibrium reactions. They help prepare for more dissociated

A CONCEPT OF MULTIPLE MIDLINES

The ability of a therapist to make positive change in an infant who has some developmental problems depends on the therapist's ability to visualize a functional objective and to then offer the infant the kind of movement experience that he needs. The therapist is helped by developing an internalized "inner eye perception" of what is needed and which reactions are trying to express themselves. The concept of multiple midlines is a way of thinking, a purely hypothetical idea, that gives us an in depth (all round) understanding of the structure of development and therefore of therapy. By using this hypothetical concept we are helped to observe and feel the activation of the righting reactions and the inter-relationships of movement responses in different parts of the body. It can be a structured guide for our therapy, and permits us to look at the baby as a whole – not simply anterior-posterior – but also laterally and especially diagonally – as well as to consider the body structure as a whole in all of our treatment handling. It helps us to understand development in a different way, and gives us a guide for planning a functional treatment.

This thinking has developed (for me) over time as a way of visualizing the developmental process so that the inter-relationships become more clear to the therapist and other professionals who are in a position to help the babies to reach their optimal potentials. By studying the drawings and reading the descriptions one can understand the very close relationship of the many movement patterns used by the baby. There is no gap between any of the directional development described, and the internal image helps us to feel the depths of development within our fingers.

The Evolving Structure of the Midlines

We think of a midline as a directed line of sensorimotor activity, a hypothetical pattern of activation, that moves along an axis in relation to which movements take place. It is a hypothetical line which lies at the center of a pattern of synergic activation and which later becomes



The lap is an adaptable surface that supports the pelvis of the child as needed. Here traction and counter traction are being used through the arms and shoulders to obtain more active head control. Note that there is constant change in the lap surface that corresponds to the changing needs of the moving child.



Lateral displacement in sitting prepares for reaching with the arm, active trunk lengthening and active equilibrium responses. Care is taken to control the teres muscles to slowly gain lengthening while protecting the scapular position.

The Hands of the Therapist

As a therapist you want to prepare yourself by becoming quiet inside and softly letting your hands “melt into the child” in order to perceive the needs of the baby at this moment in time. Try to listen with your hands so that they give you the subtle information that your eyes cannot perceive. With your hands you can become a part of the child. Give him something that he needs and is ready to use — less extraneous movement, more time, better organization, security.

The therapist will know what the baby needs — chiefly by feeling — not so much by thinking. To those who would simply observe the baby’s struggle against his or her abnormal reactions without touching, we would remind you that what you see must be felt in order to be understood. Too much handling can interfere with spontaneous reactions just as no handling eliminates the cues that the baby needs to receive. Have you ever seen a mother feed her baby with “hands off”?

Our hands permit us to perceive micromillimeters of change for the better or the worse — to know where to start — just as palpation skills permit us to perceive changes in muscle and fascia when these abilities are finely tuned. One of the unique contributions of a therapist is the use of her hands to directly improve the quality of responses.. With more practice and understanding the therapist accepts this language of touch as a reliable source of information and a useful means of guiding the baby’s development.

Listen carefully to what his body tells you through your hands:

I can accept that — give me some more please...

...a little more preparation first, then I can do it.

Help me.....I’m learning.....LET ME TRY —



Good parent instruction requires patience, understanding and repetition as needed. As soon as possible the mother and/or father is shown how to do some of the handling to continue the effect of the therapy session at home.



Lateral lengthening is combined with lateral displacement, with protection of scapular alignment and assistance to the shortening side of the trunk.



Separation of the legs in a “long step” position is combined with trunk rotation to prepare for standing on hands and feet simultaneously. The orientation of the foot as it approaches the surface improves with repetition of the entire transition..





To build tone in the trunk the therapist's hands are open to receive and to give information from both anterior and posterior directions, as well as to establish an active awareness of midline through the lateral changes described.



Very light traction keeps the arms and shoulders stable while the child experiences lateral weight shifts with the changing lap of the therapist. The therapist's legs keep a secure base while complementing the baby's changing alignment.