

# GONGE INSIGHTS

## Top, Mini Top and passive vestibular Stimulation

#### By physiotherapist Hannah Harboe

### Welcome to Gonge Insights!

When we cradle an infant in our arms or rock them in a cradle or pram, the child will often settle. The rocking movement is a gentle form of vestibular stimulation that has a soothing effect.

The vestibular receptors are located in the inner ear. They register acceleration, rotation and the perpendicular. Via our sense of the perpendicular we perceive whether our body is upright.

Vestibular stimulation is effective from the foetal stage. The unborn child's vestibular receptors are stimulated passively by the mother's movements. The foetus also has active vestibular simulation via his/her own movements.

The child's active movements in the womb tell the mother how the child is doing.

If foetal movements disappear or become too violent or continuous, the mother will usually interpret these as warning signs, and she will seek medical attention to check if her unborn child is OK.

Once the child is born, we react to violent movement by consoling the infant with cradling. Cradling is a non-verbal response that we use to console and regain contact with the child.

Vestibular stimulation regulates muscle tension. While gentle, rhythmic stimuli make us relax, rougher stimuli tend to make us tense.

In other words, vestibular stimulation is important. It helps us to learn precisely how much muscular tension is needed to perform a given activity. Registering vestibular stimuli is therefore also important for our balance.

The effect of gentle passive vestibular stimulation is to soothe. This is universal. Every child recognises it.

Such stimulation is termed "passive" when the child does not stimulate himself/herself but someone else offers the stimulation and the child can focus on responding to it. Gentle vestibular stimulation affects both physical and mental equilibrium. It can help us to find peace at both levels.

We observe that people all over the world who are in deep mourning or frustration automatically rock to and fro to calm themselves and restore equilibrium. If we seek to console someone in mourning, we will often cuddle and cradle them gently in our arms as if we were consoling a child.

Lying in a Minitop gently rocking to and fro has the same soothing effect. Cradling helps the child to unwind. He or she relaxes in response to the rocking movement. An older child can achieve the same effect in a Top. The adult sits behind the Top to prevent it from rotating a full turn. If the Top rotates, the child will roll upside-down. This is too violent and uncomfortable a movement when our goal is rather to get the child to relax.

To make the enclosed space in the Top more cosy, lay a blanket or cushion at the bottom and possibly over the child so that he/she is comfortable.

Small children love to be carried and cradled on an adult's arm. However, the Mini Top and Top are benefi- cial in other ways: Older children can move themselves into a comfortable position. Stimulation in the Top is more uniform. It is also less strenuous for the adult and the therapy can therefore continue for longer. The child concentrates on the regular, passive stimulation with less tactile stimulation and eye contact than if he/she were cradled in the adult's arms.



## Case study:

Teddy arrives at the clinic with his mother. It is obvious that they had a conflict on the way here.

Mum tries to explain so that Teddy understands what is going on but he is absolutely furious and sticks his fingers in his ears. He neither can nor will listen.

I sit Teddy's Mum down and give her a cup of coffee. With as few words a possible, I usher Teddy into the other room and lift him into the Top with a blanket and a cushion. I tell him he must try to relax and enjoy lying in the top without talking.

I sit behind him and initially rock the Top energetically to and fro. As Teddy gradually relaxes, I make the rocking movements gentler. I hum to soothe him all the time. Teddy soon relents to the rhythmic rocking movement and relaxes more and more. After five minutes, Mum enters the room.

I signal to her to come and sit with me and help rock the Top. Once she is accustomed to the rhythm, she takes over.

After 10 minutes, all three of us begin to sing a nursery rhyme. When we are done, Teddy and Mum are both smiling.

Then I explain why cradling is beneficial when you are in turmoil. As adults, we have to learn to refrain from talking and explaining when a child demonstrates frustration and anger at a level, at which we feel our explanations fall on deaf ears.

When the child has calmed down, he or she is better able to comprehend our words and follow our directions. We discuss the situation quietly and the child can learn from it, gaining experience that makes him/her better able to tackle a similar situation in the future.



Teddy and his mother learned something very important that day. They have since told me that they have used the cradling time-out and a break from talking in many different situations, which would otherwise have got out of hand.

