

# Asymmetry in position of infants

## **Tonus asymmetry – information for parents**

From day one on children memorize certain impressions and experiences unconsciously via the sense organs; they learn how to deal with the environment with success. The most important sensual impression is the body and self perception, it is responsible for walking upright, for a proper balance, the fine motor manipulations and the body skills. Self perception is done by a natural measurement system of body and movement. Every posture and movement of head, body and limbs are registered and the information is transmitted to the brain, where the information is consumed. The nerve tracts now carry the information to the muscles which are responsible for movement, posture and balance. This natural measurement system consists of certain sensors, so called receptors which are located in the connective tissue, the joints capsules and along some muscle strains. They are connected to the brain and the spinal cord through nerve tracts. Most of the receptors can be found on the back muscles, which reach from the neck to the sacrum. The highest density of receptors can be found around the area of the neck muscles, where skull and spinal column are connected. They are very important for the balance.

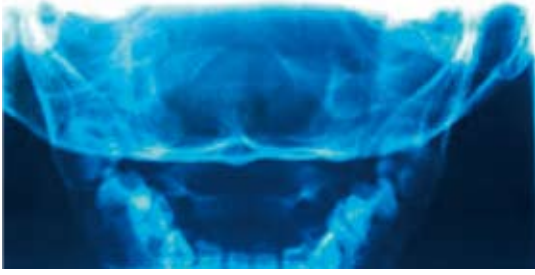
Disruptions in this measurement system can influence the control of body and the balance when the receptors give wrong signals to the brain. The result is a faulty instruction of control, which is passed on to the muscles. If this kind of disruption is caused in the neck or back muscles the infant can suffer from imbalance or muscle tensions (tonus) in the first few months of living. The picture of the 'tilted infant' can be called tonus asymmetry-syndrome (TAS), posture asymmetry, atlantoaxial joint induced symmetry syndrome, inclined position syndrome etc.

Typical syndromes are: slanted posture of the head with a one sided tilting of the head, symmetric flattening of the back of the head, also facial asymmetry and an inclined body posture, unequal movements of arms and legs, rejection of the ventral position, delayed development of the control of the head, a high affinity of overstretching the head, high sensitivity of the neck region, common defence when examining the flexibility of the hip joint, asymmetrical response to the examination of certain infantile reflexes etc. Other frequent symptoms are sleep disorders, eating disorders, a high sensitivity to noises and other vegetative symptoms. In all cases a delay of motor function development can be seen. This symptom complex can be understood as avoidance posture due to pain, the attempt of forcing the infant passively out of this posture can cause defensive reactions which intensify abnormal postures and movements.

The causes of these disruptions can differ: it can often be blamed on the unavoidable mechanic exposure of the head-neck-crossing during labour or a forced posture of the infant in the womb. Often this remains unclear.

An inflammation or a lump (not very frequent!) can be excluded. Birth deformities or infantile brain damages mostly feature other typical abnormalities. The same can be applied to the so called muscular wryneck, an isolated shortening of the sternomastoid muscle.

The normalisation of the disrupted self perception is the aim of the treatment of the tonus asymmetry syndrome. The effects of a successful treatment would be the normal control of the muscular functions to achieve the harmonic movement of the limbs. Manual medical treatment techniques, especially the Atlas therapy (see extra-info) are used during treatment of the TAS. The Atlas therapy will be supplemented by gentle chirotherapeutic manipulation of other affected vertebral joints and so called 'soft' techniques.



To begin an Atlas therapy a radiograph of the first cervical will be needed.

The frequency of the treatment depends on the development and the complexity of the disruption picture. In advantageous cases only two treatment sessions are needed.

However generally this is not the case, although it is often said to be. The treatment can only be stopped when the infant has achieved the normalisation of the malfunctions, such as full control of body and movement and sterical orientation according to age. To observe an improvement the enforcement of different manual medical and developmental neurological examinations is necessary. It is of great significance that an experienced and specially educated doctor treats the 'tilted infant'.