

Birth Trauma

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Nature's design of the birth process is quite ingenious and efficient, though when things don't go just right, its effects can be traumatic. When navigating the birth canal, considerable forces may be placed on the infants body, especially the head, tailbone, and spine.

Research on over a thousand infants has shown that 80-90% of them suffer from the effects of trauma due to the birth process and its surrounding events. Research by Viola Frymann, DO, FAAO, of the Osteopathic Center for Children in San Diego, California has shown that approximately 10% of all newborns demonstrate significant distortions in the shape and mobility of the structures of the head (cranium), while another 80% demonstrate moderate distortion after birth, and only 10% have no significant structural problems. The symptoms in the infants varied, according to the degree of birth trauma and level of vitality in the infant (strength of the immune system).

Problems from labor and delivery

During labor and delivery, structures of the body may become significantly compressed, resulting in a general decrease in function. The symptoms associated with these birth related structural problems vary with the degree of distortion and from individual to individual.

According to Osteopathy, health involves:

- Proper drainage of venous blood and lymphatic fluid.
- Proper supply of arterial blood.
- Proper "flow" in the nerves.
- Proper "breathing" of body tissues.

Health

So health involves a freedom of the distribution of all tissue fluids, proper nerve activity, and unencumbered motion of all structures of the body. Decreased health occurs when the body structure is compromised, affecting all the areas previously mentioned.

Traumatic influences, such as a difficult birth, may cause a strain to the tissues from twisting, overstretching, or compression. If the trauma is small, the body may be able to "fix" it on its own. If it is moderate to large or the recuperative capacity is too compromised, it cannot fix itself. Then the nervous system will hold these distortions, in an attempt to negotiate balance. If the forces are too great, the nervous system cannot fully compensate and the

imbalances will appear extreme.

Colic

For example, one common cause of colic is trauma during birth to the occipital area (back of the head). The occipital bone is composed of four parts at birth and nerves that pass between these parts may be compressed from the forces of labor on the head. In addition, there are also other important nerves and veins that travel between these parts and the adjacent area (temporal bones). With the compression of the occipital area and the possible change in the shape and relationship of parts of the head, pressure may be placed on these structures, altering the way in which they work and causing further symptoms. Remember, structure and function are intercalated.

Birth Process

The process of birth involves passage of the baby's head through the mothers bony pelvis. In order to easily navigate this area the infant's head must move in just the right way. This involves forward bending of the head and neck to get in to the pelvis, rotation (to one side) to get though it, and then backward bending to finally exit the birth canal.

As can be seen, the four parts of the occiput are exposed to multiple and complex forces, and commonly become twisted and compressed, causing an irritation of the nerves in that area. If the child tries to go through the birth canal in an unusual fashion, the mother has uterine fibroids, or the mother has structural problems with her tail bone or pelvis, the problems can be greatly exaggerated.

Add to this failure of the mother's cervix to dilate, a long labor, the use of pitocin (which greatly increases the force of contraction), forceps, or vacuum extraction and it is easy to see why problems may occur. If there is fetal distress, this is again trauma.

Most common problems involve:

- Impaired suckling
- Impaired swallowing
- Irritability of the stomach and colon
- Frequent spitting up or vomiting
- Colic
- Sleeplessness
- Learning disabilities
- Behavioral problems

- Mechanical problems, such as scoliosis.

In the case of cesarean section, it seems that these pathological compressive forces could be eliminated. However, there are other factors to consider. Prior to the C-section, the child's head may have been compressed for many hours in the pelvis and the pressure from this can become "imprinted" on the structures in the child's head.

Even without traumatic forces, a c-section involves a sudden change from the environment inside the uterus to outside. This can be a shock, even for the full term infant. For a premature infant, the stresses are even greater as their body is not yet ready to handle life on its own.

C-section may seem easier on the infant, however, the child needs the stimulus of being gently "squeezed" through the birth canal to properly stimulate his body to start life. Once a child is born, he takes the all important first breath. It is the first breath that initially re-expands all the structures of the body that were "pushed together" in the descent through the birth canal. A good, deep, unencumbered, full first breath needs to be taken. This can even be difficult in a seemingly "normal" delivery without trauma, if the child is effected by anesthesia or narcotic pain medication that the mother has been given. In a c-section a deep first breath rarely happens.

There are large changes in circulation that need to take place in order for the newborn to shift its circulatory processes to breathe and oxygenate blood on its own with no help from the mother. If these changes occur too quickly (including the umbilical cord being clamped immediately upon delivery), it can affect the child. The more immature the child and the more abrupt the change, the greater an affect this can have.

Indeed, there are many good reasons for which a c-section is performed and it can be a life saving procedure for mother or child. However, do not dismiss the trauma and distress that frequently occurs to the child.

Consider the common situation where a mother fails to start labor on or past her due date. The doctor may break the membranes himself to help the process along. If the mother does not go into labor soon, pitocin is given in an increasing amount to start contractions of the uterus.

If the cervix does not dilate well, then there are large forces pushing on the area of child's tailbone from the strong contractions of the uterus. The forces will be distributed from the tailbone, up the back, to the head. If the mother's cervix does not "give," or dilate properly, these forces will have to be absorbed by the child's body. If this goes on for very long, it will cause significant trauma.

Osteopathic treatment

With an understanding of normal anatomy and the application of a trained sense of touch, the osteopathic

physician can identify and treat the distortions in these affected children. This can vastly influence the first months of life for both parent and child. In general, there are also long term benefits, as these compressions may impair other functions, later in life.

Osteopathic treatment involves gentle support of the neuromusculoskeletal system. No overt or sudden forces are applied. Treatment involves applying the proper forces in the proper areas for the correct amount of time. As this is done, the body monitors and self corrects.

Osteopathy addresses the structures of the entire body. Stresses are eased throughout the entire mechanism of connective tissue (fascia) from head to toe. The rib cage is allowed to expand more fully. Blood becomes more efficiently oxygenated. Cerebrospinal fluid circulates more efficiently, and the nervous system works much better. As a result, the body is more efficient, the general level of health increases, and children usually feel better and function better in the world.