Early Evaluation Prevents Future Problems

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Every child should be evaluated and treated immediately after birth. That is preventive medicine at its best. The sooner the child can be treated the sooner optimal motion can be established in the body. The sooner the respiration and circulation can be optimized, as well as the movement of the central nervous system, the sooner the ill effects that may have occurred during the birth process will be reduced. This does not mean that problems may be totally eradicated if they are sufficiently severe, but they can be reduced.

First of all, I would like to talk a little bit about Osteopathy in general. I would like to emphasize the differences between the way in which an allopathically trained physician and an osteopathically trained physician think about a problem.

When your child was born it was, first of all, evaluated by the pediatrician. He looked to make sure there was no congenital defect, either externally visible or invisible, such as perhaps in his lungs or the heart or the digestive tract, and also to make sure that all the systems were functioning efficiently as they should be.

As osteopathically trained physicians we are looking at something more when your baby is born, because we recognize that the process of being born is probably the most traumatic experience that most people ever have.

In the study of 1250 newborn babies it was demonstrated that 10% have a healthy freely movable cranial mechanism. In other words, all of the bones of the head are in correct relationship and moving, as they should. This is a figure that has been consistent in several studies, which have been done on newborn babies.

The number of babies that have a gross, visible disturbance in the cranial mechanism - the sort of deformity that you can see across the room - that number may be somewhere about 8% or 10%.

What about the other 80% of babies born, that group in which the problem can be detected by an osteopathic physician trained to feel these minor difficulties within that mechanism. They may not be presenting major clinical problems at this age.

The child may be spitting up. The child may have had a little difficulty learning to suck, a difficulty that passed in 24 to 48 hours perhaps. The spitting up may continue for days or weeks sometimes, and very often the story we hear is, "Well, it was assumed that the milk didn't agree with the baby," so perhaps the mother decided to stop breast feeding and try a formula. In many instances that didn't solve the problem, and after several tries, some cereal was put into the formula to make it a little thicker, and often that appeared to solve the problem.

The fact that the baby was spitting up in that early period after birth, or that the baby did have difficulty learning to suck, is very important to us from a diagnostic viewpoint because it tells us that there was a degree of compression within the baby's head that irritated two of the important nerves that come out of the base of the skull -one being the 12th nerve, the hypoglossal nerve, which is responsible for the activity of the tongue and therefore is important in the sucking process, and the other the 10th cranial nerve that is very much concerned with the activity of the digestive tract at this age. Those two symptoms may be very important pointers to the problem at that time.

During the years from birth to five years, the child is checked regularly by the pediatrician concerning his ears, throat, eyes, heart, lungs, and digestive tract. In other words, is this child's body functioning efficiently?

Many children get ear infections. The ears are examined and if the infections have occurred a number of times there may be a hearing test performed, and various tests that zero in on the ears. But the ear isn't something sitting out there in space. The ear is part of a total mechanism in this body. For example, the ear itself is held in what we call the temporal bone. (If you feel just behind your ear you will feel a somewhat pointed bone, which is the mastoid process.)

From the inner part of the ear, what is known as the middle ear, there is the Eustachian tube that extends into the throat. Therefore, what goes on in the throat has a bearing on what goes on in the middle ear, and vice versa. Not infrequently the problem may begin as a sore throat, a cold, and it progresses to an ear infection. Therefore, the state of the throat and the state of the ear are very intimately related.

Let's come back to the temporal bone for a moment. The temporal bone articulates, or is connected to most of the other bones of the head, directly or with one bone in between. So, if this child has had a fall on the back of the head in which the articulation between this bone and the occipital bone at the back of the head has been jammed, the bones cannot move freely, one in relationship to the other.

Perhaps at the time of the injury the child cried for a little while, had a bruise there or a swelling, and it passed. A few weeks later an ear infection develops. If you stop to think about it, you will find the ear infection has developed on the same side on which the head injury occurred.

The blood supply to the ear by way of the arteries, the venous drainage from the ear by way of the veins, and the lymphatic drainage is impaired if that normal, rhythmic mobility of the temporal bone is interrupted. If there has been an injury it has interfered to some degree with the inherent mobility of that bone. Furthermore, if the child fell on the back of the head, that fall may have disturbed the alignment of the bones of the neck, and the blood supply passes through the neck up into the temporal bone.

So the ear problem is not confined to the ear. It may be related to certain things that have happened in levels below the ear. Now we begin to see that

we cannot localize ear infection in an ear because it is tied in to other parts of the body. Of course, the circulation begins at the heart and ends at the heart, so anything between the heart and the temporal bone may be a factor in that circulation. The lymphatic drainage is associated with certain structures in the neck, going all the way down to below the collarbone. Anything in this area may have a bearing upon that ear infection.

It is not uncommon to get the story that this child has had ear infections over and over again. Perhaps the first ear infection occurred when he was six weeks of age. He was treated with an antibiotic, he got over it; two months later there was another ear infection. He was treated with antibiotics, he got over it and six weeks later there was another ear infection, and so it has gone on, perhaps for several years, one after another.

At some point the parents decide there must be some other way. Also, by this time the child may have reduced hearing in one or both ears, so they are looking for some other answer.

This is the time we go back structurally and inquire whether there had been any evidence of injury at birth, which may have started the process, and had there been any injuries since then to which the child is now responding with this susceptibility to infection.

This brings us to the first aspect of the osteopathic concept, the osteopathic approach towards the patient, and that is that we are looking at a whole patient. We are not just looking at the point that is producing symptoms and calling your attention to it. What is there in this whole child, which is resulting in manifestation in a local area? The manifestation may be a neurological disturbance. This may be the hyperactive child who can't sit still through a meal, who can't sit still in school, who can’t sit still period. The more the parents or the teachers say, "Sit still or you will go to the principal if you don't sit still!" All that does is make matters worse.

I wonder if any of you have a condition, which is known by the title, "restless legs?" Have you ever sat in a theater and thought you just couldn't keep your legs still? And if someone had said to you, "Don't you dare move!" that would have made you much more susceptible to moving. So it is with this child who has an inherent neurological dysfunction, which makes it impossible for him to be still. The more we try to pressure him to be still, the more restless he becomes.

There are many measures used to help these children. One may be to give them some medication, but the medication doesn’t make them sit more quietly, it dulls their intellectual awareness. They may sit still and therefore learn more to some degree, but they are not functioning at their capacity because the drug is dulling their awareness. That is a stopgap measure. It hasn't done anything about the hyperactivity itself. In fact, the longer the child takes the drugs the more difficult it is to break the habit because when the drug is stopped the child becomes more hyperactive than when the drug was introduced in the first place.

What is the cause of the hyperactivity? Why does the child have to keep moving as if he is driven? Because he utilizes an external activity to make up for severe restriction in the inherent motion of these cranial bones and therefore all the structures that are related to them. They have to produce outside activity in order to make up for lack of internal activity.

It is not one area of the central nervous system that is involved, but the brain is in contact with every part of the nervous system in the body, and therefore we are concerned with the whole patient and not just one little area.

What we really are talking about is whole people, whether they are little people or big people, and recognizing that **the structure of the body is intimately related to the way it functions**. We might compare the body to a watch - not one of the electronic ones but the old fashioned variety that had a lot of wheels and gears in it. If your watch started losing or started gaining, or perhaps even stopped, and you took it to the watchmaker you didn't ask him, "Which wheel is it that is causing the trouble?" He probably would say to you, "Well, your whole watch needs overhauling so we can put it together so that every part works properly."

The body is like that too. It isn't just one piece that needs to be oiled and put back. The whole body needs to be integrated. The structure of the body is causative, it is integrated.

Childhood is a time of falls, injuries. We are not only concerned with falls that broke bones or locked the child out or put him in the hospital. We are concerned with any injury that happens to affect a critical part of this moving mechanism, and the only sign you may notice that it did that is that your child is less amenable to your directives. The tendency is to think he's naughty. As one osteopathic physician used to say, "Don't punish your children; treat them." You will find that when you treat them they change, and sometimes they change in an instant.

Some of the children come into the treatment room acting as if everything is wrong, they don’t want any toys, don't want to play, don't want anything done. All of a sudden, when that mechanism begins to move, "Can I have a toy, please?" It is absolutely phenomenal because it happens so fast. Once the key turns and the mechanism begins to move freely the child becomes himself once more. It isn't always as simple as that because it may not have been just the last injury. It may have been an accumulation of injuries that have occurred, one after another, over several years, so it doesn’t always resolve immediately. But the principle is the same. It is that interrelationship of structure and function and the unity of the body functioning as a whole. It is not a series of isolated independent parts.

The body has within it the process that heals itself. If that is true why haven't all your children been healed long ago? I'm sure you have all had the experience of a cut on your hand. Perhaps it was a deep cut; perhaps it required some suturing and a dressing put on it. Then you were told to come back in five days for the doctor to take out the stitches. The doctor didn't heal the cut. Who did? You did. You healed your own cut.

But sometimes, if something is not functioning properly in your body you will go back at the end of five days and the cut has not healed.

The same may be true of a broken bone. The bone breaks, the surgeon approximates the two ends as closely together as he can and then he mobilizes it in a plaster cast. He usually gives the instruction to come back in six weeks. It will probably be healed. But sometimes it isn't healed in six weeks. Sometimes it isn't healed in sixteen months because something is not working in the body to permit that inherent healing process to take place.

As osteopathic physicians we are very conscious of that inherent healing process. That healing process is not only concerned with knitting a bone together, healing a laceration or overcoming an infection. It is also concerned with moving the body structure. Probably many of you have had the experience of doing some unaccustomed hard work, such as working in the garden once in three months. By the time you went to bed every bone in your body felt as if it were out of place. But you went to bed and relaxed in sleep and by the morning most of that was gone. Who did that work? You did. That inherent force in your body, which is working to bring it to its optimum function, did it. But if the strain or the restriction in that free motion has gone beyond a certain point, then the body needs a little help in overcoming it. However, if we can work with what the body is striving to do we shall get there much faster. Therefore much of what we do is not visible. By that I mean we are not forcefully manipulating the body in this way and that way. We are detecting how that body wants to move, how it is striving to overcome its restrictions and then just giving it a little help to do so.

These are the three primary concepts upon which our practice is actually based. They are not just philosophical ideas in our heads, which we agree to, they are actual working concepts

- The interrelationship of structure and function,
- The recognition of the totality of the body,
- The inherent force within the body.

Now, how do we do it? That is the $64,000 question, isn't it?

The first process is getting acquainted. Still in the process of getting acquainted we are running our fingers over the various joints between the bones in the head to find out whether there is any over-riding of any of the bones, whether there is any hardness or irregularity, whether one is pushed up against the other, and also whether there is any asymmetry of the head, any imbalance in the structure of the bones of the head.

Then we move down to the spinal area. We come down the neck and then we come down through the thoracic area, the rib cage, and the vertebral area and down into the lumbar area.

After that we evaluate the lower extremities, the hip joints, knee joints and ankle joints. Then we evaluate the sacrum. The sacrum is that large bone that you can feel if you put your hand behind you (it's about the size of the palm of your hand in an adult). In the infant that is still five bones, not just

one. The rhythmic motion of the sacrum is brought about with breathing. Every time you breathe you move that sacrum between the pelvic bones. I place one hand on the sacrum and my other hand is on the pelvic bones, evaluating how the sacrum moves within the pelvis.

This is the way in which we balance the pelvis and sacrum and we can balance the lumbar spine at the same time. This area is very important because as the baby is descending through the birth canal the head is opening the birth canal but the pelvis, the buttocks, gets the pressure as the uterus contracts down on the baby. If for some reason the baby doesn't descend smoothly and progressively through the birth canal as the baby's spine has to negotiate its way around the mother's spine, and if it gets held up in that position this may tend to produce a side bending in that lumbar spine. This does not show itself outwardly at this age because this baby isn't standing. The spinal curve may not show itself until the baby begins to stand, but if we can pick it up by feeling it, by palpating it at this age and taking care of it (it only takes about 60 seconds) we can take out that twist which has become locked in there through the birth process.

Next we evaluate the head area. Sometimes, in order to keep a little baby quiet and happy, it either nurses or sucks on the bottle while it is being treated. The area of the baby's head that leads the way out of the birth canal is the occipital area, the back of the head. It is the area that will take the brunt of obstruction if there is a delay in delivery.

When there has been a long delivery, perhaps sixteen, twenty or twenty-four hours for a first baby, or even after twelve hours for a later baby - and sometimes we find mothers who have been in labor for several days, or perhaps even more important, there has been a period of false labor before the real thing began. False labor can be particularly damaging because the contraction is occurring and the baby's head has nowhere to go because the birth canal is not opening. So the baby is being compressed from above and below. It is the occipital area that takes that impact. That is where the hypoglossal nerve to the tongue and the vagus nerve to the digestive tract pass out through the skull. These are the areas that are the first to show the stress of the birth.

One of the most important questions we can ask is, "Did your baby have any trouble vomiting, spitting up?" If the answer is "yes" then we know that there was some degree of a problem in this area at birth.

Within the Occiput also is that large opening through which the whole brain stem becomes the spinal cord. All of the nerve pathways that go to every structure in your body below the base of the skull must pass out through that hole in the Occiput. Therefore, if the occiput is deformed by such pressures as we have described, the damage to the nervous system, the injury to the nervous system may vary all the way from the child who has mild spitting up to the child who is hyperactive, the child who is uncontrollable, who is aggressive, who eventually goes on to have learning problems, behavior problems and the whole gamut. So this is a most critical area, the area that we always look at when we look at newborn babies.

Then we consider the skull as a whole. The skull is made up of some twenty-six bones. At this age some of those bones are in several parts. Therefore, the potential for compression in one or more areas is quite great if there was compression in the pelvis on the head during birth.

An osteopathic physician's hands are feeling hands, they are monitoring hands. They are not pushing things around. They are monitoring how that mechanism inside is working and how we can go with it to permit it to release areas of restriction.

The temporal bone, that bone that I mentioned as carrying the ear, may also be compressed because it is very close to the occipital area. It is not unknown to find that the baby has its first ear infection at a few weeks of age. This suggests that the problem may have arisen from the trauma of birth. When that mechanism begins to move freely then the child recovers from the recurrent infections.

When the head is compressed from the front backwards, a compressive force, which we will find particularly if the baby was reversed in the birth canal. It was a posterior occiput rather than an anterior one. This sort of compression jams the skull at the center of its base.

At birth the occiput is not just one bone, as it is in the adult. In the infant the occiput is four bones because it is not yet fully developed. That large hole of the foramen magnum, through which the brain stem passes, is circled by developing parts of the occiput.

The area of the base of the skull that becomes compressed is the area we are primarily concerned with in our small babies. The problems we find there may continue and cause difficulties later in life.

The sooner you treat the baby the easier it is, but you never say, "there is nothing that can be done." No matter how much progress is made, progress is worthwhile.

Life is always in motion. Life is always getting better or it is getting worse. We may not work as frequently; we may work for an intensive period to get over the major problem, and then watch that the progress we have made is maintained, but let's go back again. What we do in the process of a treatment is just like unlocking the door so now those who are inside can move around. In other words, we are permitting the central nervous system to perform to a better standard and it will improve that standard progressively. The treatment is only the beginning of the process. It is now permitting that inherent therapeutic potency to do what it couldn't do before. Children tend to fall, bang their heads, so we treat them at regular intervals to make sure that none of these things (which are relatively minor) have been permitted to take them back one step instead of forward one step.