

## A Child's First Spinal Exam

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When is it time for a child's first spinal examination?

Should we wait until children complain of back pain before taking them to the chiropractor?

These are two questions which parents frequently ask of their chiropractor.

Throughout most communities, it is a generally well-accepted fact that children should have regular dental check-ups to identify problems at the earliest possible time. In this way, dentists attempt to identify early tooth decay and alignment problems of the teeth, because they know that the earlier the problem is detected, the easier it will be to fix.

Well, what about the potential for children to develop spinal problems? Should children be examined at regular intervals during their growing years to identify spinal problems which may progress to become serious, permanent problems. Unfortunately, the generally accepted view in most communities is that one visits a chiropractor for backache or neck pain, and in the absence of these symptoms, it can be assumed that the spine is doing okay.

When evaluating the spines of adult patients, chiropractors frequently encounter degenerative changes in discs and vertebral joint structures which have been ongoing for many years, without any evidence of symptoms. In many cases, it is only when the spinal degeneration reaches an advanced stage that symptoms of pain and stiffness occur. If the spinal problem causing these symptoms could have been detected at an early age, and the problem had been corrected, then a lifetime of misery due to chronic back pain could have been avoided.

Many of the worst spinal problems, which chiropractors detect on x-ray, show evidence of having been present for many years and can be identified, by the degree of degeneration, as having started during childhood. For this reason, it is recommended that children's first spinal evaluation should be early in life when the spine is growing and developing at the fastest rate. Orthopedists have identified that the time when the spine is most likely to develop problems, or for existing problems to worsen, is during periods of rapid growth.

Examination of the growth patterns of a child's spine shows that the time of fastest spinal growth is during the first year of life, when the average length of the spine grows from 24 to 36 cm. This is a 50 percent increase in one year, a rate which is unmatched in any other phase of a child's growth and development. The next fastest growth rate occurs between the ages one and five years when the spinal length increases from 36 to 51 cm, a 42 percent growth rate. Between the ages of 5 and 10, we see the slowest period of growth, 10 cm in five years, or a 20 percent growth rate. The adolescent growth phase is most noticeable for its growth spurts, when a teenager may grow three to four inches in less than a year. The average total growth for the adolescent period is 20 cm in males and 15 cm in females. This represents a growth rate of 25 percent in the females and 33 percent in males.

Now, taking all that into consideration, it can be seen that the period of fastest growth, the first year of life, is also a period of considerable trauma when the child is learning to walk. This phase of a child's development is also the period when the secondary spinal curves are forming in the child's neck and low back. Because the first year of life is such an important one for spinal development, and because the potential for trauma is high, it is recommended that a child's first spinal evaluations should be performed during this period.

Beyond the first year, the child needs regular checkups to ensure that the microtrauma of a child's daily living, such as "rough house" play and falls from bicycles, etc., are not causing spinal problems. Problems which might otherwise go unnoticed, simply because the child does not complain of symptoms.

Spinal growth and development continues right through until the mid-30s, when development of the vertebrae in the lumbar spine is finally completed.

When we plant a tree in the garden, we stake and tie it to ensure that it grows straight during its early years. If we don't do this, and the tree is allowed to bend with the wind for 10 to 15 years, it is then impossible to straighten.

Don't let your children's spine develop like an unstaked tree: You don't wait until your children complain of toothache before taking them to the dentist, so why wait until they complain of backache before having their spine checked?

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