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BECAUSE EVERY CHIROPRACTOR NEEDS A HAND.

## Baby Walkers: What's Best for the Infant?

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by Claudia Anrig,DC

If you walk into a baby store or attend a baby shower, you're sure to find baby walkers. Approximately 50 percent of infants make use of these man-made, upright vehicles.<sup>1</sup> Parents queried on the utility of baby walkers say they're a godsend. Ideally, infants in baby walkers are happy being upright, and can travel about and be entertained for a number of hours a week. What could be better?

### Study Results

Siegel and Burton<sup>2</sup> studied 109 infants between the ages of six and 15 months.<sup>2</sup> They compared users of baby walkers versus nonusers, and analyzed their motor and mental development. The data concluded that infants who used walkers sat, crawled and walked later than nonusers, and scored lower on the Bayley scales of mental and motor skills than the nonwalker group.

Crouchman studied 66 infants, divided into three groups, according to length of time spent using baby walkers.<sup>3</sup> It appeared that there was no difference between all three groups with the onset of sitting or walking. However, infants in the "higher-user" group revealed a significant delay in the onset of prone locomotion compared to the low or nonuser groups. The study suggested that the excessive use of baby walkers by some infants might alter their ability to engage a pathway of normal locomotor development.

Garrett, et al., studied 190 infants, 107 of which used baby walkers.<sup>4</sup> The average usage time period was 26 weeks. The study revealed that crawling, standing and walking unassisted occurred later in the baby walker group. They concluded that for every 24 hours of baby walker use, there was an associated delay of 3.3 days of walking unassisted and 3.7 days of delay in standing unassisted.

Another study of a set of six twins revealed apparent adverse electrophysiological changes of six infants using the baby walkers, compared to their nonuser twins.

Engelbert, et al., presented the cases of two infant patients who used walkers instead of walking.<sup>6</sup> These two infants were noted to have developed a disharmonic and delayed motor development, contractures of the calf muscles and motor development mimicking spastic diplegia.

Not all studies support that developmental delay will occur when baby walkers are used on infants. One study analyzed 15 pairs of twins, suggesting that the use of baby walkers did not influence the onset of independent walking.<sup>7</sup>

When comparing studies, there appears to be more evidence to suggest that baby walkers interfere with the natural process of locomotor skills and may be a cause of developmental delay. There is a definite need for more studies, which should include larger group sizes and randomized controlled trials over previous observational or

questionnaire-based studies.

## **Are Baby Walkers Worth the Risk of Injury?**

The evidence regarding injuries to infants using baby walkers is mounting and very common. In 1999, in the United States, 8,800 children under the age of 15 months were treated in emergency rooms from baby walker injuries. The most common cause of injuries resulted from falls down stairs, subsequently injuring the head.<sup>8</sup>

In another study of emergency hospital visits, injuries of infants under the age of one year were recorded. The report concluded that injuries of 8.9 out of 1,000 infants admitted to the emergency room were attributable to baby walkers, and 1.7 of 1,000 of these injuries were of a serious nature.<sup>9</sup> It should be further noted that 97 percent of baby walker accidents result in neck and head injuries.

Most injuries may be minor, and include bruises and swelling on the head, forehead, face and cheeks. However, serious injuries from baby walkers include skull fractures; concussion; intracranial hemorrhages; full-thickness burns, cervical spine fracture and death. From 1977 through 1998, there were 34 infant deaths attributed to baby walkers.

## **Can Parents Safely Use Baby Walkers?**

Considering that the majority of baby walker injuries occur in the presence of adult supervision in the same room,<sup>1</sup> it would be difficult to think these injuries could be reduced, considering that mom, dad or the infant's caregiver are already present in the room, but are preoccupied. Perhaps ironically, one of the purposes of the baby walker is to entertain the infant and give the adult time to complete a task or have a moment of rest.

Further, the Committee on Injury and Poison Prevention of the American Academy of Pediatrics (AAP) forwarded several reasons as to why the baby walker should not be recommended.<sup>8</sup> Walkers do not help an infant to learn how to walk, and can delay normal motor and mental development. The AAP states that the evidence of major and minor injury and death from baby walkers warrants a recommendation to ban the manufacture and sale of the product altogether. And finally, the committee suggests, parents should choose a walker that meets the voluntary standards of the American Society for Testing and Materials (ASTM F977-96), which require a width larger than 36 inches (that of a doorway) or a braking mechanism designed to stop the walker if one or more wheels drop off the riding surface.

## **A Chiropractic Point of View**

A majority of chiropractors, whose practices focus on the care for the young, have taken a strong stand against the use of baby walkers. First, it is unnatural to be bipedal and weightbearing prior to learning to sit, crawl and stand. The developmental spine needs to go through each milestone in order. To subvert the natural process may have its effects, not only in term of the form of locomotor and mental development of the infant, but also long-term spinal implications (i.e., asymmetry and muscular imbalance).

Chiropractors should take the time in their practices to educate their parents about the risks of the baby walker and any unseen spinal implications.

To download a free patient-friendly newsletter regarding baby walkers, go to [www.drclaudiaanrig.com](http://www.drclaudiaanrig.com).

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