Injuries Associated With Infant Walkers

Committee on Injury and Poison Prevention

Infant walkers, or baby walkers, generally consist of a wheeled base supporting a rigid frame that holds a fabric seat with leg openings and usually a plastic feeding/play tray. The two basic types of walkers include the X frame, in which the steel support bars form an X, and the circular frame, in which the support bars rise vertically from the circular base to the tray. The device is designed to support a preambulatory infant, with feet on the floor, and to the tray. The two basic types of plastic feeding/play holders form an X, and the circular frame, in which of a wheeled base supporting a rigid frame that holds a fabric seat with leg openings and usually a plastic feeding/play tray. The two basic types of walkers include the X frame, in which the steel support bars form an X, and the circular frame, in which the support bars rise vertically from the circular base to the tray. The device is designed to support a preambulatory infant, with feet on the floor, and to the tray. The two basic types of plastic feeding/play holders form an X, and the circular frame, in which...
unassisted gait of infants who use walkers may be slightly abnormal.\(^2\) There is no evidence, however, that such effects are lasting in normal children or that they have any impact on the child’s ultimate motor development or intelligence.\(^2,14\) Anecdotal reports suggest that children with cerebral palsy who use walkers experience exaggerated abnormal motor reactions and delay in development of normal balance and protective responses; again, the duration of these signs and the consequences of these observations have not been addressed systematically.\(^15-17\) Beyond parental impressions that infants “seem happier” in walkers, it does not appear that any real benefits of using a walker can be found to balance the considerable risk of injury.

**PREVENTION**

Currently mandatory and voluntary standards regarding infant walkers exist. The mandatory standard \([16\text{ CFR } 1500.86\text{ (a)(4)}]\) that has been in effect since 1971 primarily addresses injuries to digits caused by pinching or shearing in the frame of the walker and by collapse of the walker. Judging from CPSC statistics, these types of injuries are infrequent, suggesting that these standards are effective.\(^1(p39-52)\) The voluntary standards (ASTM 977-89), published in 1986 and 1989, address the more difficult problems of falls and tipovers. Although the standards contain some performance requirements to prevent tipovers and structural failures in walkers that appear to have been effective in reducing tipover injuries, falls and burns are addressed only through warning labels, strengthened by the 1989 standard. Because the number of walker-related injuries, especially falls down stairs, has increased steadily since the adoption of labeling standards, this strategy seems to be ineffective.\(^1(/pp66-71)\) Several studies have shown that the occurrence of a walker-related injury does not deter parents from the continued use of the walkers in the injured child or subsequent siblings. Thus, educational programs are likely to meet with failure as well.\(^4,5,7\) Although the labels on walkers as well as many pediatricians urge parents to supervise their children in walkers, about 17% of falls down stairs occur with the child alone in the room, as do more than half of scalds and other burns.\(^7,18\) Many events also occur with one or both parents in the room.\(^7,8,18\)

Those who oppose a ban on walkers state that stairs actually cause the injury, not the walkers. While the data do support the contention that the combination of walkers and stairs is responsible for the majority of injuries, it would be impossible to prohibit children from living in houses with stairs. Thus, the only practical solution is to ban walkers in their present design. Stair gates are not uniformly effective; more than one third of falls down stairs in one study occurred with stair gates in place, but the gate was either left open or improperly attached.\(^7\) In Canada, where falls associated with walkers were primarily down basement stairs, an attempt was made to deal with this hazard by requiring the walker base to be at least 900 mm (35.4 inches), which is larger than the standard basement door opening. Whether this strategy is effective has not been tested, as the requirement has resulted in a de facto ban of Canadian-made walkers, because manufacturers were not willing to redesign the walker for the relatively small number of sales in that country, and American walkers are easily obtained by Canadians. In the United States, recent CPSC data confirm that basement stairs are involved in about half of walker injuries, and that about 80% of the stairs are 36 inches wide or less. However, a new standard width which would prevent the majority of falls is likely to make the device so unwieldy that it would be unacceptable to parents.\(^8\)

Other engineering modifications, such as a wheel-stop device designed to stop the walker if one or more wheels drop off the riding surface and a so-called “stationary walker” with a treadmill upon which the infant can walk, have been suggested. Such modifications remain to be further evaluated. However, it is difficult to envision the value of stopping the wheels when one or more is already in the air, as gravity would carry the child and walker down the stairs in any case. Newly developed “stationary walkers,” actually play tables with rotating seats, have not been available long enough to compile data on injury rates, but do seem to be reasonable substitutes.

**RECOMMENDATIONS**

1. Because data indicate a considerable risk of major and minor injury and even death from the use of walkers, and because there is no clear benefit from their use, the American Academy of Pediatrics recommends a ban on the manufacture and sale of mobile infant walkers in the United States.

2. Efforts should be made, through strong media campaigns and during anticipatory guidance, to educate parents about the hazards and lack of benefits of walkers. The particular risk of walkers in households with stairs should be emphasized.

3. Even if walkers are banned, the life span of existing devices is considerable, and community programs should be developed to encourage proper disposal of walkers so that they can be destroyed and the materials recycled.

4. Agencies responsible for licensing child care facilities should not permit the use of walkers in approved centers.

**Committee on Injury and Poison Prevention, 1994 to 1995**

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