Skateboard Injuries

Committee on Injury and Poison Prevention

Skateboarding has resurfaced and so have its associated hazards and injuries. There are estimated 8 million skateboarders now in the United States.\(^1\) Pediatricians informed about skateboard activities in their areas can help prevent needless injuries to children and adolescents.

During the last skateboard injury epidemic, the annual incidence of injuries peaked at 150,000 in 1977 and subsequently decreased to 16,000 in 1983. It is likely that this decrease in injuries was primarily related to decreased skateboard activity and not to improved safety conditions. With increased popularity the number has risen, with an estimated 56,435 injuries being treated in emergency departments in 1992.\(^3\) In addition, an estimated 1900 hospitalizations occurred due to skateboard-related injuries during this period. The vast proportion of admissions were from head injuries.\(^2\)

Analysis of Consumer Product Safety Commission data from 1991 indicates the following salient features of the current outbreak of skateboard injuries during this period:\(^4\)

- 95% involved skateboarders younger than 25 years; 61% involved 5- to 14-year-olds;
- 87% of victims were male;
- 74% of injuries involved the extremities—usually fractures of radius and ulna, 21% to the head and neck, and 5% to the trunk;
- severe injuries (intracranial, internal) were uncommon, moderate injuries (long bone fractures) were most common, and deaths occurred almost always from collisions with motor vehicles;
- younger victims incurred a higher proportion of head and neck injuries than older victims—head injury occurred in 75% of the victims in the 0- to 4-year-old age group, 50% in the 5- to 9-year-old group, and 15% in the 10- to 19-year-old category;
- head injuries in the older age groups were more severe because of collisions with motor vehicles; and
- helmets designed for skateboarding are seldom worn but will protect skateboarders from serious head injury; data on the protective value of elbow pads, knee pads, and wrist guards are inconclusive; they may reduce injury severity.

The use of bicycle or hockey helmets has not been evaluated.\(^4,5\)

Patterns of injury at different ages can be explained by patterns of skateboard use, which, in turn, are developmentally determined. Young children generally use skateboards near their homes. These children have a high center of gravity and limited ability to break a fall. Injuries are most frequently to the head. Although these head injuries have generally not been severe, they frequently require medical attention. Older children more often use their skateboards on streets and highways. They often can break their falls but injure their extremities in so doing. When they collide with a motor vehicle or cannot break a fall at high speed, serious head injury may result.

On the basis of these data and their implications, the American Academy of Pediatrics makes the following recommendations:

1. Children younger than 5 years of age should not use skateboards. Their center of gravity is higher, their neuromuscular system is not well developed, their judgment is poor, and they are not sufficiently able to protect themselves from injury. More developmentally appropriate activities need to be encouraged.
2. Skateboards must never be ridden near traffic. Their use should be prohibited on streets and highways. Activities that bring skateboards and motor vehicles together ("catching a ride") are especially dangerous.
3. Skateboarders need to be encouraged to wear helmets and protective padding for their elbows and knees to reduce or prevent injury. The experience of children wearing multi-purpose helmets needs evaluation.
4. Communities should be encouraged to develop safe skateboarding areas away from pedestrian and motor vehicle traffic.

This statement has been approved by the Council on Child and Adolescent Health.

The recommendations in this statement do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate.

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