Sports-Related Injuries in Nonathletic Children

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Q: ARE KIDS WHO ARE LESS PHYSICALLY ACTIVE OR OVERWEIGHT AT INCREASED RISK FOR SPORTS-RELATED INJURIES?

A. Yes. Last month we reviewed how pediatricians can explain to parents the benefits of physical activity for kids, beyond weight control. This month we thought it would be important to follow up with advice on addressing parents’ concerns for when their typically inactive children get involved in sports by dealing with this important question.

Early data in support of a relationship between poor physical fitness and activity-related injury came from investigation of army trainees: a history of inactivity, higher body mass index (BMI), and low aerobic fitness were all believed to contribute to physical training-related injuries in this population. In fact, there are good data demonstrating that youth with increased BMIs have a significantly higher risk of sustaining a sports-related injury than their normal-weight peers. In a review of the available literature on obesity and injury, McHugh reported that in 11 of the 13 studies included in his analysis, a higher BMI and/or high percentage of body fat were associated with an increased risk of sports-related injury. The reported increases in injury risk ranged from 1.4 to 3.9 times the risk identified for the normal-weight control groups.

The most common injuries reported in the overweight/poorly conditioned athletes were ankle sprains, tears of the medial collateral ligament of the knee, and dental injuries. Proposed mechanisms for an increased sports-related injury rate in overweight and obese children include: poor postural control (leading to problems with balance and coordination); poor physical fitness (associated with early muscle fatigue and subsequent injury); and low pre-participation physical activity levels (associated with impaired or delayed neuromuscular and motor learning).

Overweight or poorly conditioned children do seem to have an increased risk for sports-related injuries than their normal-weight peers.

REFERENCES