Obese children more likely to suffer growth plate fractures

February 8 2012

Obese children are 74 percent more likely to sustain a fracture of the growth plate, the softer end of the bone where growth occurs. A new study presented today at the 2012 Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS), involved 224 children visiting a Maryland hospital with a fracture. Information was collected on each patient regarding their sex, age, height, weight, fracture location and pattern. Patients ages 2 to 16 were divided into two groups for comparison: a "normal weight" group and an "obese/overweight" group for children with a body mass index (BMI) greater than the 85 percentile.

The overweight/obese group represented 41.3 percent of the fracture population, and had a statistically significantly higher rate of growth plate injuries (40 percent versus 23 percent). The study, which is ongoing, also looked at the type of incidents causing the fractures, and found that the obese/overweight children had a greater number of injuries resulting from "low-energy" contact or impact, such as falling from a standing position. The findings could provide greater insight into the inherent risks for overweight and obese children pertaining to exercise and physical activity.

Provided by American Academy of Orthopaedic Surgeons