

Publication:The New York Sun;**Date:**Sep 12, 2003;**Section:**National;**Page:**4

Obesity Prevents Some Teens From Using Back Braces To Help Scoliosis, Study Says

By JULIE SATOW Staff Reporter of the Sun

Being overweight may prevent teenagers who have scoliosis from using the most common treatment available — a back brace.

In a study of 276 adolescents with scoliosis, a curvature of the spine that affects two out of every 100 teens, those who were overweight were more than twice as likely as those who were normal weight to develop worsening curvatures, despite the brace.

Nearly half of the children who were normal weight were cured with the brace.

Among the 34 teenagers who were clinically overweight, however, only 29% were helped, while 44% needed to undergo surgery.

"I hope this will be a motivating factor in getting adolescents to lose weight," said pediatric orthopedic surgeon at Johns Hopkins Children's Center, and the study's senior author, Dr. Paul Sponseller. He presented the findings yesterday at the annual meeting of the Scoliosis Research Society by researchers from the Johns Hopkins Children's Center.

"This is yet another reason to make sure your child isn't overweight," said clinical assistant professor of orthopedic surgery at NYU Hospital for Joint Diseases, Dr. Jeffrey Goldstein. "Amongst the health problems stemming from obesity, here is one more effect — that overweight kids with scoliosis are more likely to need surgery."

A back brace is the only non-surgical treatment for the disease and is designed to stop the curve from worsening by using biomechanical force to hold the spine straight. Overweight patients have more soft tissue and surface area, making it more difficult for that biomechanical force to be exerted, said Dr. Sponseller.

"Braces require exerting pressure against the body, but if a brace is pushing against fat instead of bone, it cannot mold to the body and will be less effective," Dr. Goldstein said.

The only other option to a brace is surgery, where rods, screws, and hooks are inserted into the spine to straighten it. "This is a big surgery for a kid," said Dr. Goldstein.

Surgery actually corrects the spine, while the brace prevents the curve from worsening. To lessen the discomfort of scoliosis, Dr. Sponseller said acupuncture, exercise, and yoga may help.

The study included adolescents ranging in age from 10 to 17 years who visited the Johns Hopkins Children's Center and the Texas Scottish Rite Hospital for Children in 1991-2001.

