Surgical site infections in pediatric scoliosis reviewed

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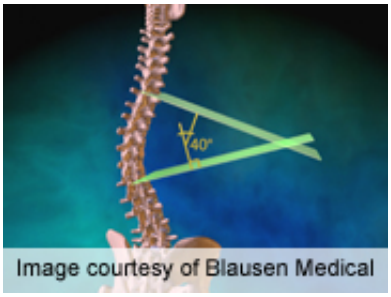

Surgical site infections, particularly those caused by gram-negative pathogens, occur more frequently following procedures in patients with non-idiopathic rather than idiopathic scoliosis, according to research published in the May 1 issue of the *Journal of Bone & Joint Surgery*.

(HealthDay)—Surgical site infections, particularly those caused by gram-negative pathogens, occur more frequently following procedures in patients with non-idiopathic rather than idiopathic scoliosis, according to research published in the May 1 issue of the *Journal of Bone & Joint Surgery*.

W.G. Stuart Mackenzie, of the Columbia University Medical Center in New York City, and colleagues retrospectively examined rates of surgical site infection following 1,347 surgical procedures to correct scoliosis in 946 pediatric patients.

The researchers found that higher rates of surgical site infection

occurred in patients undergoing procedures for non-idiopathic scoliosis, including neuromuscular scoliosis (9.2 percent), syndromic scoliosis (8.8 percent), other scoliosis (8.4 percent), and congenital scoliosis (3.9 percent), compared with procedures for idiopathic scoliosis (2.6 percent). Multivariate analysis identified non-idiopathic scoliosis and extension of instrumentation to the pelvis as risk factors for surgical site infections. The most common pathogens for surgical site infections were *Staphylococcus aureus*, coagulase-negative staphylococci, and *Pseudomonas aeruginosa*. Almost half (46.5 percent) of surgical site infections contained one or more gram-negative organisms, and almost all (97.0 percent) of these infections with gram-negative organisms occurred in pediatric patients with non-idiopathic scoliosis.

"To our knowledge, this is the only multicenter study to examine the pathogens associated with surgical site infections in patients with scoliosis from various causes," the authors write. "Our findings suggest an increased need to consider prophylaxis of gram-negative organisms."

Several authors disclosed financial ties to the biomedical industry.

More information: Abstract
Full Text (subscription or payment may be required)