

# AHEAD OF THE CURVE

The Official Newsletter of The Setting Scoliosis Straight Foundation

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## POSTOPERATIVE MOTION STUDY

By: Emma Rooholfada, Student Writer

Research in Adolescent Idiopathic Scoliosis (AIS) has progressed substantially in recent decades. However, researchers and patients still have many unanswered questions regarding the different treatment methods and their effects. The Harms Study Group (HSG) currently has many studies that need more resources. One such study analyzes postoperative motion in AIS patients.

This study aims to shed light on two questions: how the fused, motionless upper segments of the spine affect the motion of the unfused segments below, and whether or not that motion changes over time after a fusion.

According to Executive Research /Director, Michelle Marks, "Understanding how the spine moves when a fusion is performed is really critical because we need to understand whether potential altered movement is related to disc degeneration."

Researching postoperative motion can also impact surgical treatment for prospective AIS patients. Surgeons are learning that long fusions may potentially negatively impact disc health, thus strengthening the case for shorter fusions.

The study group has gathered data from patients at the ten-year postoperative point. They have analyzed patients with varying degrees and forms of AIS in hopes of determining the relationship between different types of curves and treatment methods, and motion after surgery.

Colleagues of HSG have carried out similar studies in the past using a motion analysis lab. However, the technology in such labs has proved unsuccessful in measuring the motion of individual spinal segments. Instead, HSG has turned to a new method.

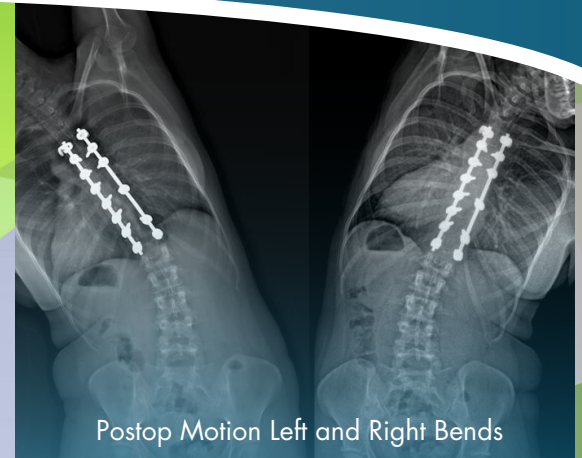
"We perform x-rays in maximal bending to the right and maximal bending to the left, and we do a calculated motion between the two angles to each side," Marks said.

Dr. Baron Lonner, surgeon member of HSG, is studying disc health in AIS patients. Lonner has evaluated radiographic markers of disc degeneration in patients at the ten-year postoperative point.

"We're hoping to look at the relationship between what I'm finding in alterations in motion and what Dr. Lonner's finding on radiographic markers of disc degeneration," Marks said.

**Unfortunately, the study lacks proper funding. When the study first began, SSS acquired a grant from the Scoliosis Research Society. Since then, SSS has funded the study, but demands from other areas have left the study of postoperative motion without financial backing.**

Hopefully, with the contributions of patient families and supporters of AIS research, the clinical questions of postoperative motion may soon be answered.



Postop Motion Left and Right Bends



EMMA ROOHOLFADA

We're excited to introduce our first contributing student writer, Emma Rooholfada! When not running track and field, writing for her school's newspaper, and engaging in fun activities as class treasurer, Emma volunteers with SSS in outreach and fundraising. Due to her passion for journalism, Emma wanted to find a way to give back, while honing her writing skills and building her college resume.

To learn more about the Postoperative Motion Study and other unfunded research, click OUR RESEARCH on the SSS website.

[www.setting scoliosis straight.org](http://www.setting scoliosis straight.org)



## Give BACKS Hope

**Scoliosis Awareness & Fundraising Event**

**Date:** Friday, June 1, 2018

**Time:** 6:30 pm to 8:30 pm

**Location:** Great Hall, UC San Diego

**Address:** 9500 Gilman Drive, La Jolla, CA 92093

**Tickets:** \$150 General Seating / \$250 Preferred Reserved Seating



**Give BACKS Hope** is held in a different city every year, bringing families from all over the country together for an evening of celebration and fundraising for a great cause! This year SSS excited to host this event in San Diego with special help from co-chairs, Rich and Kris Gelbart, Alan Olsen, and Howard Greenberg.

Help us take a stand for children with scoliosis by attending Setting Scoliosis Straight's 3rd Annual **Give BACKS Hope** charity event today. As an attendee, your investment will help fund important pediatric spine research aimed to improve patient care and treatment for children with scoliosis.

**Register for this event today! Sponsorship opportunities available.**

***This event features a formal dinner, silent auction, and a special guest performance by Composer & Chief Musicologist of Pandora Radio, and lifelong friend of the Gelbart family, Dr. Nolan Gasser.***

**Special thanks to event sponsors:**

DePuy Synthes, NuVasive, K2M, Medtronic, and Globus

**Date:** Saturday, June 2, 2018

**Time:** 9:30 am to 3:30 pm

**Location:** Rady Children's Hospital, San Diego (Educational & Meetings Building)

**Tickets:** \$20 Adults | \$10 Siblings | Patients are FREE!



The 2018 **Power Over Scoliosis** Program is well underway with an action-packed agenda to match. This year's program will take place at **Rady Children's Hospital in San Diego!** Drs. Peter Newton and Burt Yaszay have assembled a diverse faculty complete with scoliosis patient family panels to provide attendees with a birds-eye view of their personal experiences with scoliosis. From diagnosis through treatment and recovery, no question will be left unanswered. Topics such as **The Role of Genetics and Common Misconceptions** and **How to be Your Child's Greatest Advocate**, are new

presentations added to this year's agenda focusing on the importance of investing time and energy into factual information and helpful communication tips for addressing challenging conversations in a way which builds family morale and trust.

Whether your child is newly diagnosed, currently undergoing treatment, or post-op, this program was designed with you and your family in mind. Take advantage of this full day of scoliosis education and register your family on our website today!

**Special thanks to Core sponsors,**  
NuVasive and K2M, for supporting patient education!

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