VOLUME 3, ISSUE 2

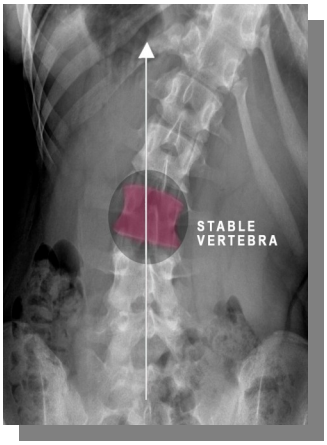
HARMS STUDY GROUP NEWS

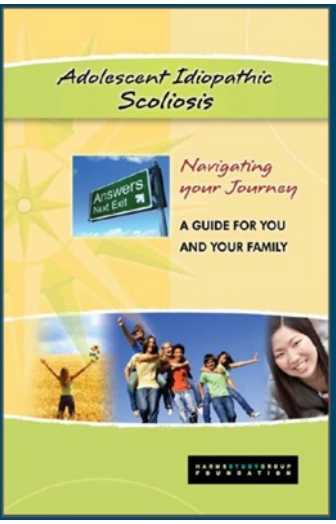
LEADING THE WAY IN SPINAL DEFORMITY SOLUTIONS

OUR MISSION *The HSG is a group of surgeons dedicated to the advancement of treatment for children and adolescents with spine deformity. Through comprehensive, multicenter prospective research studies, questions regarding treatment approach and techniques to achieve desired outcomes are studied.*

"How low can you go?" A review of a recent HSG publication

As you may know, there are several different curve patterns of scoliosis, and surgeons use several factors to determine how to best correct each different pattern. The HSG set out to determine the best way to correct main thoracic curves, one of the most common patterns. To correct scoliosis surgically, a surgeon attaches rods along the vertebrae with screws or hooks, this is called instrumentation. This instrumentation straightens the spine and helps prevent the curve from growing bigger. Surgeons want to instrument the least amount of vertebral levels as possible, while still achieving correction of the scoliosis. This is a delicate balance, but there are many factors that influence how many vertebral levels the surgeon chooses to instrument. Recently, the HSG wanted to find out how far down the spine a surgeon should instrument main thoracic curves in order to achieve the best correction of scoliosis. HSG researchers looked at data from patients who had surgery to correct scoliosis at least 2 years ago. The researchers found that patients who had the best correction of scoliosis 2 years after surgery had the lowest instrumented vertebra at or 1 level below what is called the stable vertebra. To find the stable vertebra, surgeons draw an imaginary line up from the center of the sacrum (this is the lowest part of the spine, between your hips) and find the vertebra that this line passes directly through the center, illustrated at right. These important findings were recently published in the medical journal *Spine*, which is read by thousands of spine surgeons and researchers.





HSG Adolescent Idiopathic Scoliosis Handbook

The Harms Study Group Foundation (HSGF) has sponsored the production of the Adolescent Idiopathic Scoliosis (AIS) Handbook to educate parents, patients, and the population about AIS and the available treatments. The handbook takes the reader step by step through the process of diagnosis and all treatment options, including observation, bracing, and surgery. We welcome you to read the AIS handbook for yourself, which is currently available on the HSG website as a free download for a limited time. A second version of the handbook is in production, and will take into consideration all the feedback that has been received from physicians, patients and their families, in order to create the most up to date and complete educational resource on AIS and AIS treatment options. HSGF's goal is to have the handbook translated into five languages (Spanish, French, German, Chinese, and Japanese) and have the handbook distributed around the world to educate AIS patients. In order to meet this goal, the HSGF is looking for your support! If you believe in this mission and want to help support the goal of creating and distributing the AIS Handbook worldwide, please consider a donation to HSGF to support the handbook. Please visit www.harmsstudygroup.com/donate.html and designate your support to the production of the handbook. Thank you for your support!

Swim for Scoliosis

HSG surgeon member Dr. Baron Lonner will be swimming the Strait of Gibraltar to support scoliosis research! He will swim for scoliosis on September 18, 2011. Donations are being accepted through the Harms Study Group Foundation, and any donation pledged to Dr. Lonner for his swim will be allocated for scoliosis research. Please visit www.harmsstudygroup.com/donate.html if you wish to help Dr. Lonner raise awareness and support for scoliosis research!

HARMS STUDY GROUP FOUNDATION

THE **HARMS STUDY GROUP FOUNDATION** IS A NONPROFIT ORGANIZATION WHICH PROVIDES SUPPORT TO THE HARMS STUDY GROUP: A COLLABORATIVE COHORT OF WORLDWIDE DISTINGUISHED SURGEONS DEDICATED TO THE ADVANCEMENT OF TREATMENT FOR CHILDREN AND ADOLESCENTS WITH SPINE DEFORMITY. TO LEARN MORE OR HELP SUPPORT OUR RESEACH AND EDUCATIONAL EFFORTS PLEASE VISIT OUR WEBSITE,

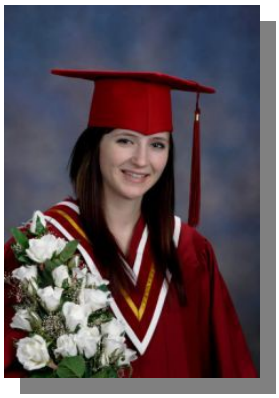
WWW.HARMSSTUDYGROUP.COM

In this issue we are proud to feature the Harms Study Group surgeon members Dr. Miyanji and Dr. Reilly at the British Columbia Children's Hospital in Vancouver, BC, Canada!

Dr. Miyanji has been a member of the Harms Study Group. As a spine physician at BC Children's Hospital, Dr. Miyanji is a leading researcher and clinical assistant professor in the Department of Paediatric Orthopaedic Surgery at the University of British Columbia. Dr. Miyanji was recently awarded the 2011 St. Giles Young Investigator Award by the Paediatric Orthopaedic Society of North America for outstanding research endeavors.

Dr. Reilly has been a member of the Harms Study Group. Dr. Reilly is currently head of the Department of Paediatric Orthopaedics at BC Children's Hospital.

Continuing Sports After Scoliosis Surgery – Caitlyn's Story



Caitlyn turned 18 this past February and graduates from High School in the spring of 2011. Caitlyn has been followed at BC Children's Hospital for Progressive Adolescent Idiopathic Scoliosis since 2005. Caitlyn joined the HSG spine research in September of 2008 as she prepared for surgical intervention. By the time of operation, her scoliosis had progressed to an 80 degree curve. Her operation included posterior segmental spinal instrumentation fusion from vertebrae T2 to L2. Following her operation, Caitlyn returned to regular activities including playing lacrosse and hockey. Caitlyn is happy to participate in research and share her story to help other children with scoliosis.

"When I was ten years old I was diagnosed with scoliosis. Right away I was put into a full back brace; it went over my shoulders and everything I was supposed to wear my brace for 23 hours a day but I played sports for longer than my one hour free from the brace. My curve was at 28 degrees when I first started wearing a brace and at my surgery it was well into the 80's. I wore it full time for 4 years; at that time they told me I only had to wear it at night. When I first got my brace it was possible that it would prevent the curve from getting worse and I wouldn't need to have surgery. 50 degrees is the biggest the curve can be without surgery, mine was over 50 in the first few years of even wearing a brace.

On September 29th, 2009 I had my surgery. I only missed two weeks of school and a whole hockey season. I was back playing the violent sport lacrosse in the spring time; I don't think many people who had the same surgery as me can say they played lacrosse just over 6 months after their surgery. I didn't want to risk snowboarding in the winter after my surgery but I have gone up the last two seasons and it has been great. I started playing hockey again a few weeks prior to playing lacrosse. Although I only played that season of lacrosse, I still play hockey and I plan on playing for a while."

"The Harms Study Group is dedicated to the advancement of treatment for children & adolescents with spine deformity"

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***REMEMBER*, as a patient volunteer in Harms Study Group research, you can continue to help.** *Be sure to make all of your scheduled follow-up appointments with your spine surgeon.* Once you have agreed to participate in HSG research, the follow-up information that you provide is CRITICAL to our success in answering our important research questions.

HARMS STUDY GROUP FOUNDATION