



HCRN update



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Courtesy: Nikki Gale Photography
(nikkigalephotography.com)

Using Quality Improvement to Reduce Surgical Infections

The premise of quality improvement is simple: reduce variation and quality goes up. Toyota has been doing this successfully for years. Many hospitals are applying this concept to healthcare provision. The HCRN is applying quality improvement to shunt surgeries.

It starts with a quality problem and a provocative question. The problem is that the rate of infection for patients undergoing shunt surgeries is too high, about 8-10% of all procedures.¹ The costs and suffering of this should, if possible, be avoided. The provocative question is: "if all of us in the HCRN did our shunt surgeries the same way, what affect, if any, would that have on shunt surgery infection rates for patients in our care?"

The neurosurgery teams at the four HCRN "centers" (all children's hospitals) have been following a specified protocol for doing shunt surgery. The first 17 months of data were summarized and presented at the Pediatric Section of the American Association of Neurological Surgeons/Congress of Neurological Surgeons meeting in Spokane, Washington, December 3, 2008 by Dr. John Kestle.

The results are preliminary and inconclusive, but so far the infection rate looks lower when the neurosurgery teams followed the protocol. In addition, the infection rate for teams using the protocol appears lower than it was prior to starting the protocol at the same centers. The protocol will continue for at least another year and a final report will be published after all the data have been analyzed. Continuous quality improvement will ensue to try to get infection rates as low as possible.

¹[Pediatr Neurosurg.](#) 2000 Nov;33(5):230-236; Long term follow-up data from the Shunt Design Trial

New Logo and New Website!

Paul Gross commissioned a logo for the HCRN which debuted in the last issue of the update. You can see it below and on our new website www.hcrn.org!



“The most effective investment for an under-researched condition like hydrocephalus is clinical research. By studying differing patient care methods and outcomes, and by building registries, clinical research leads the path toward best-practice care.”

Dr. Robert Beall, President and CEO of Cystic Fibrosis Foundation at the 2008 Bethesda, MD Hydrocephalus Association’s “Accelerating Hydrocephalus Research Workshop”

HCRN Vision: Our vision is that, in 5-10 years, doctors will use HCRN research-based evidence to improve the diagnosis, treatment and outcomes of hydrocephalus patients and that these patients will live longer, more trouble-free lives than at present. Over that same timeframe, we envision greater attention and financial resources directed toward hydrocephalus research and treatment.

Hydrocephalus Association Meets in Salt Lake

The Hydrocephalus Association, the national nonprofit that is the leader in patient education, support and advocacy, held their national meeting, which occurs every two years, in Park City in June 2008. Dr. John Kestle gave a presentation on the HCRN. The work to date and goals for the future were described and many attendees were very interested in participating in future studies. Getting exposure at this event was extremely helpful for advancing the HCRN case that clinical research is desperately needed to guide better treatment practices and outcomes.

New Coordinator Hired at Salt Lake DCC

We are excited to welcome Marcie Langley as our new coordinator at the Data Coordinating Center in Salt Lake City. Marcie joined HCRN in September 2008 after working previously with Dr. Tamara Simon on a hydrocephalus research effort.

Network to Grow in 2009!

Several high-profile research hospitals have expressed interest in joining HCRN. This is further confirmation of the merit of our multi-center approach to hydrocephalus clinical research. Criteria for expansion of HCRN have been developed and we expect to expand modestly next year. Expansion will be a deliberate and careful process to ensure maximum collaboration and research quality, and use resources wisely.

Alabama Hosts HCRN Annual Scientific Meeting

On September 15, 2008 Chevis Shannon, Dr. Jay Wellons and Dr. Jerry Oakes hosted HCRN’s investigators and coordinators for an annual meeting.

Highlights of the meeting included the first report of the registry data by Dr. Jay Riva-Cambrin and the fine tuning of Dr. William Whitehead’s study protocol for Ultrasound Placement of Ventriculoperitoneal (VP) Shunts. The registry is a powerful tool for testing hypotheses on patient population cohorts. The new VP placement study will launch in the first quarter of 2009 and aims to see if ultrasound placement makes for a better outcome for the patient requiring a VP shunt.

To Contact the Hydrocephalus Clinical Research Network

Dr. John Kestle, HCRN Chairman, at john.kestle@hsc.utah.edu.

To make a contribution to the HCRN

Please contact Douglas Nielsen at Primary Children’s Medical Center Foundation at (801) 662-5970. All contributions are tax deductible as allowed by the IRS.