

The Game Plan

Aggressive Treatment Returns a Young Athlete to Sports

A FADING PINK SCAR, two-and-a-half inches long, traces the outer sole of Samantha Boardman's left foot. You likely wouldn't see it if she didn't point it out.

But it's not "just a scar." It's a landmark, the genesis of a condition called iliofemoral deep vein thrombosis that last summer nearly changed Samantha's life forever. The condition, which can be fatal, threatened to take Samantha's ability to play field hockey, a sport she loved.

"During the last fire drill of the 2008 school year, I was standing behind a set of closed doors," recalled Samantha. "When someone came along and threw the door open, my foot got caught under the door, puncturing the outside of my left foot."

An infection triggered a perfect storm of clotting factors in the teen's groin and left thigh. Fueling the problem was immobilization as the wound healed, as well as a hereditary condition known as Factor V Leiden mutation that causes increased blood clotting and prescription progestin that also increased her blood's clotting ability. A dangerous iliofemoral deep vein thrombosis had developed.

"Iliofofemoral deep vein thrombosis is the blockage of a main outflow vein in the lower half of the body," said AAMC vascular surgeon **JON A. HUPP, M.D.** "The standard treatment to prevent future clots from developing includes blood thinners and leg compression, rather than removing the original clot."

The problem with the traditional approach, said Dr. Hupp, is the leg is rarely normal again. More than half of these patients have lifelong problems with leg-swelling, pain, and leg ulcers. Blood thinners would have prevented Samantha from playing rugged or contact sports because of the risk of bleeding from a muscle tear or body trauma.

"When the doctors in the emergency room first told me I wouldn't be able to play field hockey again, I was devastated," said Samantha. "Field hockey is my life; I wanted to play in college. I was destroyed."

But Dr. Hupp had a plan to keep his young patient in the game. "DVT therapy today is changing," he said. "We have the ability to go after the clot itself. Here we had a teenage girl, an athlete — it didn't make sense to have her on blood thinners forever."

The game plan included installing a vascular filter to trap potentially damaging pulmonary embolisms and removing of the massive clots in the veins in Samantha's pelvis and thigh. "The clot we removed was more than a foot long and the diameter of your thumb," Dr. Hupp recalls. "If a piece

had broken loose, she also could have suffered a fatal pulmonary embolism."

The aggressive approach worked. Samantha missed much of her senior season, but is now back on the field. Her athletic abilities have attracted college scouts, and she's enjoying the life of a high school senior.

"I'm so grateful to be able to play field hockey again," said Samantha. "It's my life, and Dr. Hupp saved it."

If you would like more information about the diagnosis or treatment of vascular disease, ask your family doctor for a referral to the AAMC Vascular Center. Or call askAAMC at 443-481-4000. For a list of vascular surgeons, visit our Web site at www.ashs.org.



Vascular surgeon Jon Hupp removed a large blood clot from the major vein in Samantha Boardman's pelvis and right leg, allowing the high school senior to return to her love, field hockey.