

Math Teacher's Husband Saves Man's Life

February 2007 Minuteman

By Jim Conrey

Director of Public Information

Steve Singley is an accidental hero.

Last summer, he drove his wife, SHS mathematics teacher Cheryl Singley, to Arlington Heights so she could sign up for a national registry of people willing to donate blood stem cells to others in need.

Unfortunately, Cheryl was told she couldn't join because of a neck problem. So, she turned to her husband and asked if he wanted to sign up. Even though he hadn't planned on it, Steve decided to sign up.

Two months later, on September 1, Steve received a letter from LifeSource with an urgent plea. A man with Hodgkin's Lymphoma would die without a transplant of healthy blood stem cells — which Steve could provide. Against the odds, he was found to be a match. Could he donate?

"I was nervous because I didn't know what it entailed," Steve said.

Many people believe the only way healthy blood stem cells can be donated is through the painful process of a bone marrow transplant. In fact, stem cells also can be found in umbilical cord blood, and in the bloodstream — which is how Steve was able to donate.

As it turns out, the process was relatively simple. After a second round of tests confirmed he was a suitable donor, Cheryl had to give Steve a series of injections of filgrastim over a five-day period that increased his white blood cell count by 5,000 times the normal amount. Filgrastim forces stem cells out of bone marrow and into the bloodstream by acting like a virus attacking the immune system.

"It gives you flu-like symptoms, without the fever," he said. "It tricks the body into thinking you're sick."

After five days, Steve donated his blood stem cells in a procedure that took three to four hours, but was not much different than a typical blood donation.

"It's amazing how simple it truly was," Cheryl said. "I told all my classes, because some of them will be turning 18 soon. The registry needs donors."

More than 5.5 million people have joined the National Marrow Donor Program registry, but only one in 200 will go on to donate. Currently, a match is found in about 8% of all cases. One reason why is because the odds of matching tissue types are very high.

The registry looks at human leukocyte antigens, which are proteins found on most of your body's cells. The antigens help identify your tissue type. Your immune system uses the antigens to recognize which cells belong in your body and which do not.

"The doctor said he'd never seen a match found so quickly," Steve said. "It all happened so fast. Some people are on the registry and never get called. I was on it for two months. I was shocked."

By donating, Steve improved the chances of survival significantly for the man, who is "rather big" but about whom nothing else is known. Overall survival rates two to three years after a transplant range from 30-60%. Without a transplant, survival rates are 15% or worse.

"It was unbelievable that Steve was a match because he didn't plan to sign up for the registry," Cheryl said. "We think it's a God thing."

Steve is pleased to have helped someone in need, but doesn't consider himself a hero.

"The nurses from LifeSource and the hospital, they're the ones who are saving lives," he said. "I just showed up. Four or five days of feeling like you have the flu is nothing compared to what this guy was going through with (chemotherapy) and everything else."

For more information on blood stem cell donation, go to www.marrow.org.