

# The FOCUS

Bloodless Medicine and Surgery Program

2015

MedStar Franklin Square  
Medical Center

MedStar Georgetown  
University Hospital

## Patient's Perspective as shared by Andrea Kirkpatrick

I always understood the phrase, "a stitch in time saves nine", but to actually put it into practice is another story. The truthfulness of those words hit home in February 2011 when my father was diagnosed with small bowel cancer. Although the warning signs were there, by the time he went to the doctor it was already stage four; treatable but not curable. This diagnosis and his subsequent treatment proved quite the challenge not only to my father and stepmother but also to me and my siblings who lived 10 hours away from him. The doctor was able to buy us two years with him and within that time, we welcomed the arrival of our first grandson.

The thought of a new life beginning and an old one ending was at times too much to bear, but I persevered with my rigorous schedule as a wife, mother, babysitter, part-time caretaker, and still served full-time in my ministry. My defense mechanism was to internalize my pain, put on a happy face and be strong for everyone else, all the while putting my own well being on the back burner.

I was with my father when he took his last breath on January 28, 2013. Not only was it a life-shattering experience but it also proved life-changing for me. I was determined not to procrastinate when it came to my overall health. I became more cognizant of not only what I was putting in my body but what I was putting on it. After embarking on a regular exercise program, extremely painful menstrual cramps, accompanied by severe heavy bleeding started to interfere with my progress. The unusual fatigue that followed rendered me incapable of carrying out normal tasks. Without delay I made a visit to my general doctor who then diagnosed me with fibroid uterine tumors, three of which had grown

outside of the uterine wall the size of tennis balls putting pressure on my bowels and bladder. The uterine wall itself was filled with small tumors which were causing the severe bleeding that resulted in severe anemia to the point that my bone marrow had no iron stores left in it. The most definitive treatment was to have a hysterectomy.

As one of Jehovah's Witnesses, I refuse blood transfusions of any kind because I respect the sanctity of blood and refuse to misuse it in way contrary to God's laws. So my first experience with the specialist proved to be very discouraging and unfruitful. I felt attacked for my religious convictions and was told that the surgery would not be performed unless I first signed a release allowing the surgeon to give me blood in case something went awry during the procedure. I thought to myself, "how can we live in such a medically advanced time and yet there are still doctors who don't know about medical alternatives to blood?" My personal medical choices are no different than another patient who chooses not to have a specific medication given to them. Needless to say I left that office and never returned.

That very same day my husband contacted Michael Hofmann, the coordinator of the Bloodless Medicine and Surgery Program (BMSP) at MedStar Franklin Square and within one week I had an appointment with Dr. Leigh Matlaga an expert in the daVinci robotic surgery. The initial experience that I had with her was above and beyond anything that I could have hoped for. Although not sharing my same views, she honored and respected mine. She recommended an iron infusion that would build my hemoglobin up to a level

that she deemed safe for surgery. After just two short months, my surgery was scheduled on March 14, 2014. I would be remiss if I didn't mention that the BMSP team proved invaluable when it came to accommodating my wishes, even ordering a cell-salvage machine to be put in the operating room in the event something went wrong.

Dr. Matlaga and her medical team successfully performed my four-hour surgery with minimal blood loss. I am pleased to say that I am healthy and strong seven months post-op and I've even started a training program to run my first 5K in the very near future. However, most importantly, my husband and I are looking forward to enjoying our 25th wedding anniversary next month.

My sincerest gratitude goes to the entire BMSP team, Dr. Matlaga, and her entire surgical team. They gave me peace of mind prior to surgery, renewed health afterwards, and throughout the whole process they were respectful of my rights as a patient. Thank you!



Andrea Kirkpatrick and her husband, Tim

If you would like to share your positive experience as a patient of the MGUH Bloodless Medicine and Surgery Program, please feel free to contact us at **202.444.1797**.  
Maybe you'll see your story in our next issue of **The FOCUS!**

# The Overview of Preoperative Anemia Management

Preoperative anemia management is a core principle of MedStar's Bloodless Medicine and Surgery Program (BMSP), and one of the essential pillars in successfully providing safe and effective care for our patients. One of the main approaches in this endeavor is optimizing the body's blood building capacity through appropriate management of anemia. It highlights the importance of preoperative anemia screening and preoperative correction of anemia as an essential component of bloodless medicine. Anemia is not only a major risk factor for transfusion, but it is also an independent predictor of morbidity and mortality, and patients should be monitored for anemia throughout their course of care.

## Preoperative Preparation

Healthcare providers should take preoperative steps to minimize or plan for the risk factors that are associated with anemia such as stopping anticoagulation therapy, starting antifibrinolytics (type of substances that prevent the breakdown of blood clots and used to prevent excessive bleeding), and correcting preoperative anemia. Detailed history-taking and physical examination is the first step in preoperative anemia management. Close attention should be given to family and past history of anemia and bleeding disorders, as well as medications that affect coagulation, to identify patients who are at higher risk of anemia and bleeding, and plan accordingly. Essentially, the preoperative evaluation should include a medical chart review and questions regarding bleeding history (previous surgical complications, bleeding complications after trauma, dental procedures and family history of bleeding disorders) and current medications or herbal supplements that may cause coagulopathy; and laboratory testing that includes hemoglobin, hematocrit, platelet count, and coagulation profile. In the case of Jehovah's Witnesses, providers should have a discussion with the patient regarding specific blood products and available procedural interventions and fill out the BMSP instruction and consent form.

## How Much Time is Needed?

It is recommended that the hemoglobin level be measured 28 days (4 weeks) before the scheduled procedures in elective orthopedic surgery patients. These patients should be treated to achieve a target hemoglobin level within the normal range by the time of surgery. Laboratory testing should be used to determine the cause or reason for the anemia and guide the treatment options. The most common causes of anemia detected in preoperative testing include iron deficiency anemia, vitamin B12 deficiency, chronic kidney (and associated decreased erythropoietin production), chronic inflammatory diseases, and folate deficiency.

## The Choice Agents

Management of anemia consists of treating the underlying cause and use of therapeutic

agents (any substance that tends to increase the amount of hemoglobin in the blood) to rapidly restore hemoglobin levels to normal. Choice of agents should be guided by the source of the anemia as well as the patient's condition and available time prior to surgery. Commonly used agents include oral or intravenous (IV) iron, folic acid, vitamin B12, and erythropoiesis-stimulating agents (ESAs). ESAs are highly effective in increasing hemoglobin levels, and they can produce the equivalent of one unit of blood per week of treatment.

Iron supplementation is an effective therapy to increase hemoglobin level in patients with iron deficiency anemia (or increased iron demand), and possibly even in patients without iron deficiency who are at risk of anemia, although more evidence is needed for the latter indication. Intravenous iron preparations are available with various formulations (iron dextran, iron sucrose, iron gluconate, and ferumoxytol), each with specific characteristics to treat iron-deficiency anemia. The role of IV iron has become even more important as the primary therapy for anemia, and as a support of ESA therapy, to improve efficiency and decrease the ESA dose.

Additionally, evidence indicates that IV iron with or without ESA therapy can help avoid transfusions in surgical patients. Adverse events associated with IV iron are usually mild. The most feared complication of IV iron is allergic reaction, but it is not an issue with newer IV iron supplements such as iron sucrose and iron gluconate, to the point that a test dose may not be required for some of the formulations.

## Conclusion

Anemia should be considered a treatable symptom of an underlying disease. Preoperative evaluations will sometimes identify more significant medical conditions that are present simultaneously in a patient. If preoperative screening detects evidence of gastrointestinal bleeding, bone marrow disorders, or significant renal disease, referrals to specialists such as gastroenterologists, hematologists, or nephrologists may be indicated. A delay in elective surgery may be necessary to insure patient safety and care.

The emerging data supports that preoperative anemia management is safe and effective in providing better care and improving patients' outcomes while avoiding blood transfusions. In order to benefit fully from the preoperative anemia management, it is important for patients to understand the main concept of this approach and to be advocates for themselves in the early stages of discussion with surgeons. Along the way, MedStar's BMSP team is here to assist patients to be screened for possible anemia, in order to promote safety and the best outcome.

Contributed by **Jeong H. Chae, RN**  
Nurse Coordinator, BMSP at MFSMC

# Check out what we've

# DONE!

Since its inception in 2011, MGUH's Bloodless Medicine and Surgery Program has performed a wide range of intricate surgeries and treatments without the use of blood transfusion, including:

- ✓ **90 total joint replacements**
- ✓ **5 partial and total nephrectomies (kidney removal)**
- ✓ **5 whipple surgeries for pancreatic cancer**
- ✓ **3 liver resections for tumors**
- ✓ **2 kidney transplants**
- ✓ **Bloodless treatment for bone marrow disorders:**
  - Myelodysplastic Syndrome (MDS)
  - Diffuse Large B-Cell Lymphoma (DLBCL)
  - Acute Lymphoblastic Leukemia (ALL)
- ✓ **The first hospital in the area to offer bloodless treatment for patients with ALL**

We thank our dedicated physicians and surgeons for their expertise and eagerness in applying bloodless alternatives in so many specialties for the benefit of our patients!



## GO GREEN!

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BMSP Newsletter

In order to minimize cost and waste, we invite subscribers to receive their issues of **The FOCUS**, and other program updates, via email. Please encourage your friends and family to sign up today by contacting one of the program offices at the phone numbers or emails listed below.

Note: All addresses are kept confidential and used solely to send program updates and newsletters. Your address is never sold or used for other solicitation purposes.

## TWO LOCATIONS TO SERVE YOU!

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