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CANCER CENTER PROFILE

Massachusetts General Hospital Cancer Center: Survivorship Initiative for Patients Who Have Undergone Bone Marrow Transplant



The Mass General Bone Marrow Transplant Survivorship Program team (left to right): Areej El-Jawahri, MD; Julie Vanderklish, NP.

The Mass General Cancer Center is an integral part of a top-flight academic medical center: Massachusetts General Hospital. The Mass General Cancer Center is among the leading cancer care providers in the United States, and is a National Cancer Institute–designated comprehensive cancer center as part of the 7-member Harvard Medical School consortium. This con-

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Reducing Disparities in Survivorship Care

By Chase Doyle

San Diego, CA—Surviving cancer is the start of a new journey for many individuals. Cancer survivors face a multitude of challenges, including prevention of new and recurrent cancers; interventions for illnesses secondary to

cancer and its treatment; concerns related to employment, insurance, and disability; and coordination between specialists and primary care providers. These challenges are compounded when trying to ensure the appropriate,

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Direct Access to Colonoscopy Improves Screening Rates, Adenoma Detection

By Wayne Kuznar

San Francisco, CA—A Direct Access Screening Colonoscopy (DASC) program at Advocate Illinois Masonic Medical Center in Chicago was found to increase the overall screening rate for colorectal cancer (CRC) by almost 100% without excess complications.

The program is run by a nurse navigator, who questions patients over the telephone to determine patient eligibil-

ity for the program and provides instructions for bowel preparations, said Gabriel Rodriguez, MD, resident, Advocate Illinois Masonic Medical Center, at the 2017 Gastrointestinal Cancers Symposium.

CRC is a highly preventable disease if detected early. Despite efforts to inform the public about the clear benefit of CRC screening, the majority of the pop-

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Autologous Breast Reconstruction Has Better Outcomes Than Implants in Patients Receiving Radiotherapy

By Phoebe Starr

San Antonio, TX—The largest study to date comparing outcomes of radiation therapy and postmastectomy breast reconstruction found higher rates of complication and failure in women who received radiation therapy and had implant reconstruction versus autologous reconstruction. These data have been long-awaited, because there are no firm guidelines, and more women are being treated with radiotherapy.

“The benefits of radiation for selected women with breast cancer are well-established. Updated guidelines recommend individual consultations for women who want breast reconstruction. Breast reconstruction has a significant impact on survivors. The integration of radiation and reconstruction is widely feared and poorly understood, with only limited evidence to date,” said Reshma Jaggi, MD, DPhil, Deputy Chair, Depart-

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sortium forms the largest research collaborative in the country, and has participated in developing promising new treatments that have revolutionized the treatment of cancer.

The Mass General Cancer Center provides customized multidisciplinary care to children and adults. In addition to medical oncology, surgical oncology, and radiation oncology, the cancer center offers a full range of cancer care-related programs.

These include the Katherine A. Gallagher Integrative Therapies Program, which offers free wellness programs for patients and their caregivers; the Lifestyle Medicine Clinic for patients and survivors who want a personalized consultation to improve their overall physical fitness and quality of life; a sexual health clinic; the Marjorie E. Korff PACT program, which offers psychoeducational support for patients who are parents; and the Center for Psychiatric Oncology and Behavioral Sciences, which helps patients cope with the psychological and behavioral impact of their cancer.

The Mass General Bone Marrow Transplant (BMT) Survivorship Program is a new initiative specifically designed to improve the lives of patients who have undergone BMT. The program features several unique components that address the various aspects of BMT survivorship, and is open to patients who are ≥ 1 years post-BMT.

The *Oncology Nurse-APN/PA (TON)* spoke with Julie Vanderklisch, NP, about the comprehensive efforts involved in planning the program and bringing it to fruition. Ms Vanderklisch is co-leader of the program under the directorship of Areej El-Jawahri, MD, a BMT and palliative care specialist at the Mass General Cancer Center.

TON: What distinguishes the BMT Survivorship Program from other survivorship programs?

Julie Vanderklisch: As far as I am aware, there is a limited number of BMT survivorship programs in the United States. We designed our program based on the recognition of the immense medical, psychological, and survivorship needs of hematopoietic stem-cell transplant recipients. Our goals are to provide high-quality survivorship care, conduct innovative research specific to BMT survivorship, and improve the quality of life and care of BMT survivors, their families, and caregivers.

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cialists, medical experts, palliative care, and support for sexual health and psychosocial issues.

TON: How did you go about designing the program?

Ms Vanderklisch: We realized we first needed to understand survivorship and what it entails. We reviewed data on the effects of cancer treatments and BMT complications, as well as survivorship recommendations from the American Cancer Society, the American Society of Clinical Oncology, the National Institutes of Health, and the National Cancer Institute. We also met with directors of other BMT survivorship programs and then began our clinical design.

We created up-to-date follow-up recommendations for each organ system affected by BMT. We collaborated with Massachusetts General Hospital staff who were experts in each of those areas and who had clinical interest in the long-term complications of BMT. We also made sure that these experts would be available for quick referral. Finally, we were able to design the clinic operations, the survivorship care plan, educational materi-



Areej El-Jawahri, MD

als, and methods for communicating with BMT specialists, primary care physicians, and patients. We worked with excellent social workers and psychologists in developing the psychosocial component of our program and support services.

TON: This sounds like a time-consuming effort.

Ms Vanderklisch: Yes, it took us more than 1 year, working part-time approximately 10 to 20 hours per week, to design the program.

TON: Did you and Dr El-Jawahri have any help in laying the groundwork?

Ms Vanderklisch: Dr El-Jawahri and I did most of the groundwork. However, we received guidance and support from many local experts in BMT and chronic graft-versus-host disease (GVHD), such as Nathaniel Treister, DMD, DMSc, Chief, Division of Oral Medicine and Dentistry, Brigham and Women's Hospital, Boston, MA; Arturo P. Saaverdra, MD, PhD, Medical Director, Medical Dermatology, Massachusetts General Hospital; and many others. Our superb social work, psychology, nursing, and nurse practitioner teams were also very helpful.

We performed a trial run that started in July 2016. We saw 23 patients through December and then reviewed our approach and made some adjustments. We officially opened on January 6, 2017, and are seeing 1 to 2 patients weekly. To date, 30 patients have been through our survivorship program. Our goal is that every patient who has undergone an allogeneic stem-cell transplant at Massachusetts General Hospital will be seen at the clinic. People who are ≥ 12 months from time of transplantation can be referred. We now have approximately 60 referrals awaiting consult.

TON: What does the initial assessment entail?

Ms Vanderklisch: It takes approximately 4 hours to complete a survivorship consult. We approach a survivorship visit by first reviewing the patient's diagnosis, cancer treatment (including BMT), side effects, and medical history. Next, Dr El-Jawahri or myself meet with the patient, which takes approximately 60 to 90 minutes. After that, we write an individualized survivorship care plan in the longitudinal medical record and discover our recommendations with the BMT team, primary care physician, and the patient. This takes approximately 4 to 5 hours. Our patients also meet with the social worker for 1 hour to process the BMT experience, and with a program nurse to review things such as diet, exercise, infection prevention, and education about chronic GVHD.

TON: How did your career path lead to caring for patients who have had BMT?

Ms Vanderklisch: During nursing school at Northeastern University, Boston, MA, one of my cooperative work/study programs was at Dana-Farber Cancer Institute, Boston, in the BMT inpatient unit. I fell in love with transplant and the patients I met there.

Since then, except for a brief hiatus to have my children, I have always worked with BMT patients. After working at Massachusetts General Hospital on the inpatient BMT floor, I wanted to be able to expand my role in transplant. So I went back to school to become a nurse practitioner. I have been a nurse practitioner for 17 years within the Partners System at Massachusetts General Hospital, Dana-Farber Cancer Institute, and Newton-Wellesley Hospital. My main area of interest is chronic GVHD, a complex side effect of BMT that has a significant impact on quality of life.

TON: Have there been any recent advances in the management of chronic GVHD?

Ms Vanderklisch: We are getting better at preventing GVHD using targeted therapies, whereas in the past we relied more on high-dose steroids. We now have specialists who focus on various organ systems affected by GVHD, and are able to tailor our treatments accordingly. Compared with 17 years ago, patients now have new treatment options depending on the site of chronic GVHD (ie, oral, ocular, genital, and skin/fascia).

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Evidence Supports the Use of Aspirin for Precision Chemoprevention of Colorectal Cancer

By Meg Barbor, MPH

Cape Town, South Africa—Overwhelming evidence supports a chemopreventive benefit of aspirin on colorectal cancer (CRC), and a potential effect on other cancers and cardiovascular risk, according to Andrew T. Chan, MD, MPH, Chief, Clinical and Translational Epidemiology Unit, and Director, Gastroenterology Training Program, Massachusetts General Hospital, Boston, at the American Association for Cancer Research International Conference on New Frontiers in Cancer Research.

“Aspirin is potentially the chemopreventive agent for which there is the strongest evidence of effectiveness at prevention,” he said.

Consistent experimental and epidemiologic evidence has demonstrated an association between aspirin and a lower risk for CRC. In addition, 5 placebo-controlled, randomized controlled trials (RCTs) among patients with a history of colorectal adenoma or cancer showed that aspirin reduced the risk for recurrent adenomas, which are precursors to the vast majority of cancers, reported Dr Chan.

Aspirin’s Impact

Other modalities of CRC prevention rely heavily on screening—in particular, colonoscopy screening. Although there is widespread consensus that this type of screening is effective, certain limitations exist.

“It appears to be more successful in reducing the risk of distal colorectal

cancer, and less successful in reducing the risk of proximal colon cancer. So there’s reason to consider other types of modalities, particularly modalities that are more cost-efficient,” Dr Chan said.



“Cancer is poised to overtake cardiovascular disease as the leading cause of death in the US [United States], so aspirin can potentially have an impact on the 2 leading causes of mortality in much of the world.”

—Andrew T. Chan, MD, MPH

The CAPP2 RCT examined aspirin use among patients with the Lynch hereditary CRC syndrome, and data from long-term follow-up demonstrated that randomized aspirin treatment was associated with a lower-risk for CRC. The same results were demonstrated in the Women’s Health Study, an RCT that examined the effectiveness of aspirin for the primary prevention of cancer and cardiovascular disease.

“It’s very well-known that aspirin potentially has benefits for the prevention of cardiovascular disease,” Dr Chan noted. Secondary analyses of RCTs of aspirin for the prevention of cardiovascular disease have demonstrated reductions in the incidence of,

and mortality from, CRC with regular aspirin use. In 8 cardiovascular RCTs, aspirin reduced the risk for overall cancer death.

“Cancer is poised to overtake cardio-

vascular disease as the leading cause of death in the US [United States], so aspirin can potentially have an impact on the 2 leading causes of mortality in much of the world,” he said.

In 2016, the US Preventive Services Task Force (USPSTF) updated its primary prevention guidelines for aspirin because of overwhelming evidence in support of its benefits. The USPSTF now recommends low-dose aspirin (81 mg daily) for the primary prevention for cardiovascular disease and CRC in adults aged 50 to 59 years, and possibly aged 60 to 69 years, with a >10% 10-year risk for cardiovascular events.

“This recommendation represents a significant milestone for the field of

preventive medicine. With the exception of tamoxifen for women at high risk for breast cancer, this is the first medication broadly recommended for cancer prevention by the USPSTF,” said Dr Chan.

Personalizing Chemoprevention

Despite increased recognition of the effectiveness of aspirin as chemoprevention, wider-scale efforts are limited because of concerns over its established association with gastrointestinal bleeding. The hazards associated with long-term aspirin use do necessitate strategies for risk prevention, cautioned Dr Chan.

He said molecular and genetic markers in prostaglandin and inflammatory pathways hold particular promise for precision medicine. As part of a broader effort to tailor prevention strategies, Dr Chan and colleagues have led several studies into the mechanistic basis of aspirin’s anticancer effect, and, in turn, have developed intratumoral, colonic, germline, and circulating molecular correlates of outcomes.

“Such biomarkers can be exploited for risk stratification to more effectively target aspirin chemoprevention for those with more favorable risk-benefit profiles,” he said.

“Aspirin can impact multiple steps in the pathway, so you can imagine the potential. Even if patients develop resistance to 1 pathway, they can still be sensitive to aspirin because it can affect other pathways,” Dr Chan added. ■

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TON: How did you get involved in the survivorship program?

Ms Vanderklisch: I met Dr El-Jawahri at Massachusetts General Hospital and she knew about my BMT experience and in-depth interest in chronic GVHD. She asked if I would be interested in developing a survivorship program.

TON: Can you provide some specific examples of interventions you will use in the BMT Survivorship Program?

Ms Vanderklisch: We are preparing to initiate patient and caregiver support groups and patient support groups. In addition, we plan to launch a webinar

on March 1, 2017, that will deliver 8 weekly sessions, each 1.5 hours in length, covering different long-term complications of BMT. These include intimacy and communication effects, chronic GVHD, and fatigue. Each session is co-led by a nurse practitioner or physician and a psychologist, and the focus is on education, discussion, and mindfulness exercises.

TON: What is the most challenging aspect of working with BMT survivors?

Ms Vanderklisch: The biggest challenge is time management. Many patients have multiple problems that are clinically complex. We have to address all of their healthcare needs, and, at the same

time, not overwhelm them with multiple follow-up appointments and testing.

TON: What aspect of this work is the most rewarding?

Ms Vanderklisch: By educating our patients and other physicians about BMT survivorship, our patients will have better clinical outcomes and improved quality of life. This is the most exciting and rewarding aspect of this initiative. For example, I’ve seen patients who have not been able to have sexual intercourse for years because of pain related to GVHD or vaginal atrophy. We have been able to offer interventions to alleviate these symptoms and improve or restore their sexual health.

Addressing sexual health is only one

specific component of our survivorship program, but a very important one.

TON: Do you plan to quantify your results?

Ms Vanderklisch: We will use specific quality metrics, including bone health, pulmonary function tests, ocular exams, and other measures for the different organ systems.

TON: Is the survivorship program covered by health insurance?

Ms Vanderklisch: I have had no issues regarding coverage for a survivorship visit. Survivorship consultations will become standard for BMT programs around the country. ■