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UPDate

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Integrating conventional and naturopathic medicine

The Swedish Cancer Institute (SCI), through its relationship with the Northwest Natural Health Specialty Care Clinic, offers onsite naturopathic services for patients with cancer. This partnership makes available to SCI patients the state-of-the-art treatments and procedures of conventional medicine, and the holistic quality-of-life approach of naturopathic medicine. Having a naturopathic doctor as an integral part of the patient's health-care team ensures a safe, sensible and scientific complementary therapy plan that respects and supports all other treatments.

"We take an integrated approach to the diagnosis and treatment of cancer," says **Albert B. Einstein, M.D.**, executive director of the Swedish Cancer Institute, "We make available highly sophisticated testing and treatment technologies, and also complementary services, such as naturopathic care. Each of our patients is unique; therefore, each one receives a customized care plan that meets his or her specific needs. Conventional medicine and naturopathic care are natural partners in fighting cancer and improving patients overall wellbeing."

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Swedish adds robotic arm system for knee surgery

The Swedish Orthopedic Institute (SOI) at Swedish Medical Center/First Hill is the first facility in the Puget Sound area to perform MAKOplasty®, a new partial knee resurfacing procedure designed to treat early- to mid-stage osteoarthritis (OA). It can potentially provide quicker rehabilitation and more natural knee motion after surgery.

Millions of Americans suffer from OA and a large percentage of them are diagnosed when the disease is in the early stages. For many people with chronic knee pain, MAKOplasty could be a viable alternative to total knee replacement or traditional manual partial knee resurfacing. Patients can experience minimal blood loss and have smaller surgical incisions, plus they may have shorter hospital stays and quicker recovery. Many patients return to an active lifestyle within weeks of the procedure.

"Osteoarthritis is the most common form of arthritis and a leading cause of disability worldwide," says SOI orthopedic surgeon **Sean Toomey, M.D.**

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IN THIS ISSUE

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Focusing on survivorship

The principle of survivorship is a relatively new focus in cancer care. Just as conventional medicine musters every available tool for killing tumor cells, survivorship addresses with equal vigor the related problems that come with a cancer diagnosis. These include quality of life, digestive function, sleep quality, side effects from the cancer or from treatment, psychological and spiritual well-being (including depression and anxiety), the ability to perform daily activities, financial challenges, relationship stresses, sexuality, end-of-life issues, and much more.

Northwest Natural Health providers focus exclusively on specialty care, working in concert with patients' physicians. Every patient encounter is dictated, transcribed and reported to all other treating providers. The clinic's providers are experts in drug-nutrient (DNI) and other interactions, so they are able to help patients who use both conventional and natural medicine avoid problems.

"We are fully integrated with the Swedish Cancer Institute's complementary care program," says **Dan Labriola, N.D.**, director of Naturopathic Services at SCI, and director and founder of Northwest Natural Health. "Our naturopathic doctors have received rigorous specialty training and accreditation, and have considerable experience working in a multidisciplinary environment. Whether our care is provided onsite or via telehealth, we are able to bring an additional perspective to the treatment plan."

Naturopathic medicine combines traditional natural therapies with nutritional and botanical science. Following a thorough review of the patient's records and current treatments, the naturopathic doctor takes a history and conducts a physical examination and detailed review of systems. The resulting treatment plan emphasizes botanical medicines, clinical nutrition, diet, lifestyle and other adjunctive therapies that can support the patient's immune system and manage treatment side effects.

The Washington Comprehensive Cancer Control Partnership, funded by the Centers for Disease Control and Prevention, and administered by the Washington State Department of Health, is a mainstay in advocating for cancer survivorship, improved access to cancer care and prevention initiatives. Drs. Einstein and Labriola, and the Swedish Cancer Institute are long-time dedicated supporters of this organization.

Integrating naturopathic medicine into cancer care underscores the SCI philosophy of harnessing all available resources in the fight against cancer.

Case Report: From planning his funeral to playing golf

Daniel Labriola, N.D., Director of Naturopathic Services, Swedish Cancer Institute

In April 2010 Robert Holmstrom was diagnosed with non-small cell lung cancer with malignant pleural and pericardial effusion. His medical specialists designed a treatment plan that included therapies that are frequently effective; unfortunately, they had limited success in this case.

After just one chemotherapy cycle of premetrexed cisplatin Avastin, the patient experienced deep vein thrombosis, bilateral pulmonary embolisms, severe nausea and vomiting, and likely peritoneal disease. Chemotherapy was discontinued and aggressive medical management was implemented, including multiple hospitalizations and diagnostic procedures that failed to identify the underlying cause of the nausea and vomiting. Medications, including Phenergan (both suppositories and intravenous), Zofran intravenous, Compazine intravenous, Reglan, Prevacid, Ativan, Pepcid and others, did not materially relieve the symptoms.

In May the patient was put on total parenteral nutrition (TPN), hospice care was initiated and funeral arrangements were made. During subsequent months, the nausea and vomiting continued. The patient lost 40 pounds, with significant muscle wasting and deconditioning.

Mr. Holmstrom was seen by our clinic in July 2010. At the time, he was ambulatory, although very weak, and had difficulty raising himself from a chair. His appearance was gaunt from weight and muscle loss. His attitude, however, was good.

Applying the principles of survivorship, our goal was to help improve his quality of life, beginning with the nausea and vomiting. We conducted a detailed review of systems, focusing on gastrointestinal issues. Gas, dyspepsia, severe nausea and vomit-

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Case Report

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ing, and some constipation were most notable. I could not clearly identify the etiology, but suspected a combination of prior gastritis, mucositis from treatment and perhaps achlorhydria.

Because Mr. Holmstrom was already in considerable discomfort, we took great care to be certain our treatment plan did not risk making him feel worse. The protocol we implemented included a gastric digestive enzyme and an herbal combination that included musa paradisiaca (a specific variety of herbal plantain), deglycerrhizinated glycyrrhiza (licorice root with the steroidal component removed), and Ulmus Fulva (slippery elm). Additionally we introduced specific dietary interventions to minimize mechanical stress on the gastric and duodenal mucosa. The strategy was one we commonly use with patients on concurrent chemotherapy, after taking into account potential drug-nutrient interaction (DNI).

After one week, Mr. Holmstrom reported a significant reduction in nausea and vomiting, from "continuous severe" to "occasional moderate." At the end of the second week, he indicated there was almost no nausea, and he was eating three meals per day.

When Mr. Holmstrom called after week three, he reported that the nausea and vomiting had returned, albeit just one event. We reviewed the program and his symptoms. We also discussed his compliance, which was very good except for one trip to a restaurant where he ordered his favorite meal – fried crab cakes. The nausea and vomiting followed that meal by a few hours. The solution to that problem was obvious and with no more fried crab cakes, that nausea event was his last.

Once his gastrointestinal system stabilized, we initiated a mild exercise program, adjusting his diet to increase protein to maintain a positive nitrogen balance for muscle mass and the digestive enzyme accordingly. With regular monitoring, we worked to gradually and carefully increase his strength, quality of life and ability to perform normal activities of daily living.

By September 2010 Mr. Holmstrom had regained nearly 30 pounds, and was jogging 3.5 miles four times a week and playing golf.

By his choice, Mr. Homstrom is currently receiving no additional oncology diagnostics or treatments. Physical exams have been normal, except for some right basal lung fluid. The patient denies dyspnea and feels his digestive system is without problem.

As of January 2011, nearly a year after his initial diagnosis with Stage IV lung cancer, Mr. Holmstrom was continuing to improve. He had regained 43 pounds and looks fit. With the support of his oncologist, he continues to refuse further diagnostics or cancer treatment. Although we are not able to report on his cancer, we can report that his quality of life has significantly improved and his attitude continues to be excellent.

(Editor's Note: Robert Holmstrom's name is used with his permission.)

About the author

Daniel Labriola, N.D., is director of Naturopathic Services at the Swedish Cancer Institute, and the director and founder of Northwest Natural Health Specialty Care Clinic in Seattle. He is a graduate of Syracuse University, and received his doctor of naturopathic medicine from Bastyr University. He has held multiple positions in both private and public organizations to increase awareness of the role of complementary and alternative medicine (CAM) in patient care. He is author of the book Complementary Cancer Therapies, and numerous articles that have appeared in peer-reviewed professional journals. He is co-chairman of the Survivorship Task Force, which is part of the Washington State Comprehensive Cancer Control Partnership. Dr. Labriola is one of the first CAM physicians to treat patients in a hospital environment on a regular basis.

One patient's perspective

The cancer may not be cured, but Robert Holmstrom is comfortable with the life he has lived and the quality of life he has right now – thanks to the naturopathic care he has received from Dr. Labriola.

There is no doubt the diagnosis of Stage IV lung cancer came as an absolute shock to this active, healthy man.

"I never had any physical problems," says Bob, a small business owner and house painter for 30 years. "I quit smoking 17 years ago and for the last 10 years I was running 100 miles a month. Who would have guessed that a casual comment to my doctor about a little discomfort in my chest would end up as a diagnosis of cancer?"

Bob went from his doctor's office to the hospital and then into chemotherapy. His system, however, could not tolerate the treatments. He was continually nauseous and vomiting. He began to lose weight and hope.

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A portal for Swedish digestive health services

Swedish Gastroenterology serves as the cornerstone of the Swedish Center for Digestive Health, a multidisciplinary group of physicians and staff with expertise in a broad range of digestive disorders. The center brings together gastroenterologists; hepatologists; oncologists; radiologists; and colorectal, thoracic, transplant and general surgeons. The close collaboration among these specialists ensures each patient receives the best treatment plan, and that the components of the plan are carefully coordinated.

The Swedish Gastroenterology medical group provides consultative and diagnostic services, and treatments and procedures for routine and complex digestive health problems. These specialists see patients with common gastrointestinal concerns and screening needs, and are also a referral center for many complex conditions that require the experience, expertise and resources of an advanced endoscopy group associated with a major medical center.

(See related Case Report on page A5.)

Robotic arm system

(continued from A1)

"This technology allows us to treat patients with knee osteoarthritis sooner and with much greater precision."

Good candidates for MAKOplasty typically have three common characteristics: knee pain with activity on the inner knee, under the kneecap or the outer knee; pain or stiffness when starting from a sitting position; and failure to respond to non-surgical treatments or non-steroidal anti-inflammatory medication.

MAKOplasty is powered by the RIO® Robotic Arm Interactive Orthopedic system, developed by MAKO Surgical Corp., which features a tactile robotic arm and a 3-D visualization system. In surgery, only the diseased portion of the knee is resurfaced, sparing the patient's healthy bone and surrounding tissue. An implant is secured in the joint to allow the knee to move smoothly again.

The system develops a pre-surgical plan that details the technique for bone preparation and customized implant positioning based on a CT scan of the patient's knee. During the procedure, the system creates a live 3-D virtual view of the bone surface and correlates it to the pre-programmed surgical plan.

The RIO Robotic Arm Interactive Orthopedic system features a robotic arm and 3-D visualization system. The partial knee resurfacing procedure (see X-ray on right) may be a viable alternative to total knee replacement or manual partial knee resurfacing. Images courtesy of MAKO Surgical Corporation.

"The robotic arm provides real-time tactile, auditory and visual feedback," says SOI's **James Crutcher, M.D.** "This helps surgeons accurately balance the knee and correctly position the implants."

MAKOplasty procedure time and cost are comparable to traditional partial knee replacement. It is covered by most Medicare-approved plans and private health insurers.

Opened in 2008, the Swedish Orthopedic Institute was the first dedicated facility of its kind in the Northwest and today is one of the largest in the United States

For more information about MAKOplasty or to refer a patient, please call 206-386-6000.

Case Report: Bleeding from multi-focal metastatic renal cell cancer to the stomach controlled by endoscopic resection

Drew Schembre, M.D., FASGE, FACG, Medical Director, Swedish Gastroenterology

A male patient in his 60s was diagnosed with renal cell cancer in 2002 and underwent a right nephrectomy at that time. He developed a metastasis to his left adrenal gland in 2008 and had this removed surgically. Subsequent to that, he was found to have a mediastinal metastasis that was also removed.

Despite some mild adrenal insufficiency, hypertension and type II diabetes, he had remained healthy before presenting to the emergency department in late 2010 with weakness, dyspnea and near syncope. At that time he had melena and a hematocrit of 20 percent. He had been taking an 81-mg aspirin daily along with a proton pump inhibitor, and had been experiencing no abdominal pain or weight loss. A recent colonoscopy had been unremarkable.

Upper endoscopy revealed three friable nodules ranging from 8 to 30 mm in the proximal stomach with spontaneous oozing *(See figure 1)*. Biopsy revealed metastatic clear cell renal carcinoma. Because of the multi-focal lesions and limitation of endoscopic hemostasis techniques, such as cautery or injection

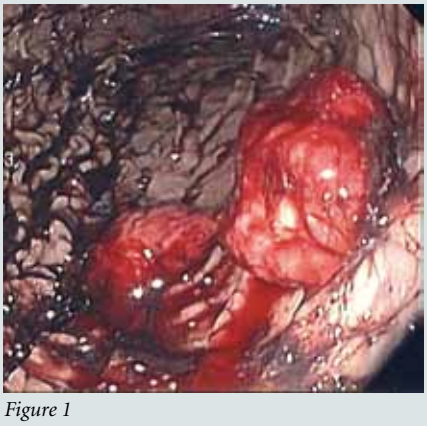

Figure 1

to control bleeding in this setting, surgical consultation was obtained anticipating palliative total gastrectomy.

Pre-operative evaluation with endoscopic ultrasound (EUS) revealed that unlike many types of metastases to the stomach, these lesions resided entirely within the mucosal layer *(See figure 2)*. At the same endoscopy, using a two-channel endoscope, the lesions were

Figure 2

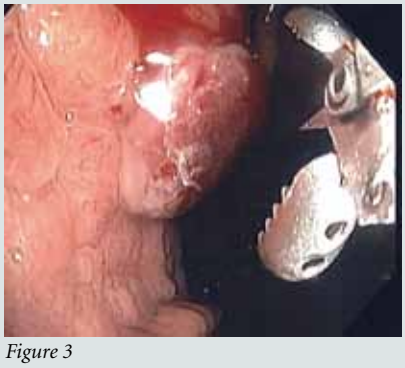

Figure 3

grasped and pulled within three separate PolyLoops® (Olympus Endoscopy, Central Valley, PA) *(See figure 3)*, anticipating they would slough and bleeding would stop.

The patient did well with some mild discomfort overnight and required no further transfusions. Repeat endoscopy after 72 hours revealed small mucosal ulcerations but no residual tumor on biopsy *(See figure 4)*. Subsequent endoscopy two months later revealed one small

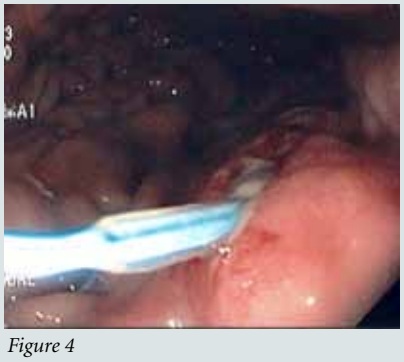

Figure 4

(5 mm) residual tumor that was resected with an endoscopically placed variceal band. He has been otherwise asymptomatic with normalization of his hematocrit and no evidence of further bleeding.

Renal cell tumors account for about 2 percent of new cancer diagnosed in the United States. Approximately 58,000 new cases were expected to be diagnosed in 2010 with an estimated 13,000 of these individuals likely succumbing to the disease.[1] Surgery can be curative for M0 disease, but the cancer can recur locally or at distant sites, sometimes several years later. Chemo and radiotherapies have not been shown to be particularly helpful; surgical treatment of solitary metastases, however, can extend survival.[2] The most common sites for metastases include lung, liver and bone, but a variety of atypical locations have been reported, including pancreas, small intestine, thyroid gland and, very rarely, stomach.[3] [4] Renal cell metastases to the GI tract usually present as anemia or overt bleeding. Treatment is usually limited to surgery; successful embolization, however, has been reported.[5] Lung, esophagus and breast cancers have been known to metastasize to the stomach, but usually seed the submucosal layer and tend to present as ulcerated masses.[6] Breast and uterine metastases may present as linitis plastica.

Endoscopy for gastric lesions has evolved considerably over the past two decades from simply a diagnostic role to one where endoscopic mucosal resection (EMR) or endoscopic submucosal dissection (ESD) can be used as primary therapy for superficial benign and malignant lesions. Endoscopic ultrasound – a technology where an ultrasound transducer is fixed to the tip of an endoscope – allows for high-resolution imaging of the five layers of the gastric wall, as well as definition of lymph nodes and peri-luminal anatomy up to several centimeters distant. Lesions limited to the mucosal layer or even superficial submucosa can be safely removed as long as the muscularis propria remains uninvolved. Injection of saline into the submucosal space increases the margin of safety. Mucosal resection not only serves as primary therapy but provides a large, intact piece of tissue for histologic

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staging. Cancers that remain in the mucosal layer – intra-mucosal carcinoma – rarely metastasize, whereas cancers that extend into the submucosa spread to local lymph nodes in more than 20 percent of cases.[7] Because the lesions in this patient were known to be metastases from a previously resected primary, further staging was not necessary. The small risk of bleeding and perforation was reduced even further by simply allowing the involved tissue to necrose and slough.

In Japan, where gastric cancer remains common and screening programs often detect the disease in its early stages, EUS followed by ESD has become the standard treatment for early lesions.[8] Using these techniques, specimens several centimeters in diameter can be removed intact using only endoscopic techniques. In this country where gastric cancers are much less common and are not often detected at early stages, gastric ESD is rarely performed. Further, endoscopic tools necessary for ESD are not currently approved for use in the United States. Nevertheless, existing endoscopic tools, such as cap-assisted EMR, polypectomy and endo-looping, which have proved invaluable for Barrett's esophagus and large colon polyps, can be adapted for treating superficial gastric and small bowel lesions. The gastroenterology service at Swedish Medical Center has access to and experience with all available tools and techniques for these non-surgical, endoscopic procedures.

Endnotes

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About the author

Drew B. Schembre, M.D., received his medical degree from New Jersey Medical School in Newark. He completed his internal medicine residency training and gastroenterology fellowship at the University of Utah in Salt Lake City. Dr. Schembre completed a second fellowship in advanced endoscopy at Columbia Presbyterian Medical Center in New York City. His clinical interests include early diagnosis of gastrointestinal cancers, gastro-esophageal reflux and Barrett's esophagus, inflammatory bowel disease and a variety of other disorders. Along with general endoscopy, he has focused on the use of advanced endoscopic techniques, such as endoscopic ultrasound, deep enteroscopy, and endoscopic resection and ablative technologies to provide non-invasive or minimally invasive diagnostic and therapeutic solutions for conditions that previously required surgery. He is actively involved in clinical research, and with local and national gastroenterology societies. He serves as a clinical associate professor of medicine at the University of Washington and on numerous review and editorial boards.

One patient's perspective

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He and his wife Frances began planning his funeral.

That's when they invited Dr. Labriola into their lives. After two weeks of digestive enzymes, herbs and a strict hypoallergenic diet of pears, cantaloupe, cream of rice, rice protein and Greek yogurt, Bob's digestive system had calmed down and he was able to enjoy eating again. He began to gain weight. With the added weight and resulting energy, he also began to enjoy life again.

Although Bob periodically experiences fluid buildup in his chest, he is back to running three to four times a week and lifting weights. He is comfortable with his decision not to receive any additional chemotherapy treatment.

"I am so lucky Frances and I found each other," says Bob. "With Frances and our two cats nurturing me, my life is good."

CME Course Listing

March — September 2011

Physicians from across the region and around the world come to Swedish Medical Center's Continuing Medical Education (CME) courses to learn about new research and innovative treatment techniques.

For times and locations, go to www.swedish.org/cme or call 206-386-2755.

High-Risk Obstetrics: Tools for the Family Physician
– Friday, March 4

A Course on Compassion: Empathy in the Face of Chronic Pain
– Friday, March 11

Pacific Northwest Head, Neck and Thyroid Cancer Symposium
– Friday, April 1

The Art and Science of Combining Naturopathic and Allopathic Medicine in a Clinical Setting
– Friday, April 8

Emil Jobb Gastroenterology Symposium
– Friday, April 15

Prevention and Infectious Disease in Primary-Care
– Friday, April 22

SIS 2011 Cardiology Nurse/ Tech Symposium
– Thursday-Friday, April 28-29

Annual Oncology Symposium: New Concepts in the Treatment of Hepatocellular Carcinoma
– Friday, May 6

Fifth Annual Cerebrovascular Symposium: New Therapeutics for Today's Patient
– Thursday-Friday, May 12-13

Highlights in Cardiovascular Therapies: A Contemporary Course for Cardiac and Vascular Specialists
– Friday, May 20

Spine Management for the Primary-Care Physician
– Friday, June 3

2020 Foresight: Future Directions of Clinical Epilepsy and Neurophysiology
– Thursday-Friday, June 9-10

Management of Hospitalized Neurological and Neurosurgical Patients
– Friday, June 17

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Swedish Medical Center

Founded in 1910, Swedish Medical Center is the largest, most comprehensive, nonprofit health-care provider in the Seattle area. Based in Seattle, Swedish comprises five medical facility campuses (Ballard, Cherry Hill, Edmonds, First Hill and Issaquah), Swedish Visiting Nurse Services and Swedish Physicians — a network of 15 primary-care clinics. In addition to general medical and surgical care, Swedish is known as a regional referral center, providing specialized treatment in areas such as cardiac care, oncology, orthopedics, high-risk obstetrics, neurological care, pediatrics, organ transplantation and clinical research. For more information, visit www.swedish.org or call 800-SWEDISH (800-793-3474).

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