A Case Study in Successful Healing of Chronic Refractory Wounds

Last May, a 74-year-old female patient with a history of Type 2 diabetes, diabetic neuropathy, multiple wounds and a trans-metatarsal amputation of her left foot came to the Stamford Health Wound Care and Hyperbaric Center for a non-healing amputation site after other surgeries for diabetic ulcers had failed. “This patient developed wounds due to Charcot foot, a condition that resulted from diabetic neuropathy,” said Joey C. Papa, MD, General Surgeon and Medical Director of the Wound Care Center. “In most cases, it is not only the wound that needs to heal, it is the whole patient. Our goal was to conduct a holistic re-evaluation of this patient to determine the most effective approach to help her recover and improve her quality of life.”

At the Wound Care Center, a multidisciplinary team of specialists treats patients suffering from chronic, non-healing wounds. In this patient’s case, specialists drawn from general surgery, vascular surgery, endocrinology, infectious diseases, podiatry and nursing closely collaborated to formulate a treatment plan that was tailored to her complex needs.

“Healing wounds in the setting of Charcot neuropathy is particularly challenging because of the patient’s health and wound-related factors,” explained Dr. Papa. “Diabetes causes a dysregulated inflammatory response, which in turn can result in chronic, low-grade wound inflammation because the immune cells that regulate the balance of these factors are not performing as they should. For this patient, a coordinated team approach that included aggressive diabetes management, antibiotic therapy, targeted wound care with innovative products, and patient education with counseling was vital to her recovery.”

The patient’s comprehensive workup included a vascular evaluation to determine the adequacy of blood supply to the left foot. She began antibiotic therapy that targeted the specific microbial colonization within the wound area. To enhance wound repair, Dr. Papa applied a skin substitute made from a bioactive tissue matrix allograft composed of dehydrated human amnion/chorion membrane (dHACM).

“The skin substitute lays down growth factors to encourage repair and reduce the production of MMPs (matrix metalloproteinases) that can inhibit wound repair,” said Dr. Papa. “It also provides collagen scaffolding that allows the wound to shift out of its chronic wound phase and begin to proliferate healthy tissue.”

The patient was also fitted for a new offloading boot to reduce pressure on her foot, and she received strict instructions about walking and limiting time spent on her feet.

Over the course of six months, the nursing team worked closely with the patient through every phase of her treatment. “Our nurses excel at identifying with patients and helping them navigate through all of the complicated medical recommendations,” said Dr. Papa. “Their emotion-driven and social approach inspired this patient to accept what she needed to do and ultimately take responsibility for her health.”

After six months, the patient’s wounds were completely healed. “This patient had suffered 25 wounds on her left foot over the past 20 years,” said Dr. Papa. “For the first time in as long as she could remember, she had no wounds and was finally able to keep up with her many grandchildren.”
Letter from the Chair of the Department of Surgery

I am pleased to present the Winter 2019 issue of Precision, the quarterly newsletter of the Department of Surgery at Stamford Health that highlights our commitment to providing the highest level of comprehensive, patient-centered surgical care.

In this issue, we are proud to feature the Stamford Health Wound Care and Hyperbaric Center under the leadership of Joey C. Papa, MD. Drawing on the collective experience of specialists from many fields, the Center offers the latest leading-edge products and advanced technologies such as bioengineered skin substitutes that improve patients’ wound healing and their overall well-being.

This is an exciting time for the Department of Surgery as we continue our mission to provide outstanding care for our patients. I am pleased to share the following articles and updates with you:

- A case study of a 74-year-old woman with Type 2 diabetes and non-healing wounds due to Charcot foot neuropathy underwent comprehensive, holistic treatment at the Wound Care Center that resulted in complete resolution of her wounds.

- A conversation with Joey C. Papa, MD, about the latest developments and challenges in the chronic wound healing field.

- A warm welcome to Mohamad Zanbrakji, MD, general, trauma and critical care surgeon.

It is an honor to work with so many outstanding surgeons and staff to provide exceptional care to our patients.

David Yuh, MD, FACS, FACC
Chair of the Department of Surgery, Stamford Health

Introducing

Mohamad Zanbrakji, MD
General, Trauma and Critical Care Surgeon, Stamford Health Medical Group

Mohamad Zanbrakji

The Stamford Health Department of Surgery is proud to welcome Mohamad Zanbrakji, MD, a general, trauma and critical care surgeon with special interest and expertise in emergency general surgery, trauma surgery, laparoscopic and robotic surgery.

At Stamford Health, Dr. Zanbrakji provides general and minimally invasive surgery services including the latest laparoscopic and robotic approaches to a wide range of surgical disorders such as appendicitis, bowel obstruction and gallbladder issues, as well as elective surgery for hernia repair, soft tissue masses and abdominal wall reconstruction.

Dr. Zanbrakji received his medical degree from Ross University School of Medicine. He then completed a general surgery internship and residency at Stamford Hospital, Columbia University College of Physicians and Surgeons, followed by a fellowship in trauma and surgical critical care at Yale University School of Medicine.

“I was drawn to the field of trauma and surgical critical care because it enables me to combine my knowledge and technical skills.”

University College of Physicians and Surgeons.

Board-certified in both general surgery and surgical critical care, Dr. Zanbrakji enjoys applying his intensive clinical training to caring for the sickest patients who often present with multiple comorbidities. “I was drawn to the field of trauma and surgical critical care because it enables me to combine my knowledge and technical skills,” he said. “In the ICU, I find it most gratifying to care for severely ill patients and help them return to their normal lives by the time they leave the hospital.”

As he builds his practice here in Fairfield County, Dr. Zanbrakji strongly believes that everyone deserves access to healthcare. He also joined a global surgery group and is planning his first trip to Uganda to educate and train doctors and provide surgical care to people with dire needs.
Innovative andCompassionate Care at the
Stamford Health Wound Care and Hyperbaric Center

In a field of rapidly advancing techniques and technologies, the Stamford Health Wound Care and Hyperbaric Center is one step ahead of the curve in its collaborative approach to wound repair, offering the latest procedures, products and supportive care that empower patients to heal and return to optimal health.

For four consecutive years the Wound Care Center has received the Robert A. Warriner III Center of Distinction Award for meeting the highest standards set by Healogics, Inc., the nation’s largest provider of advanced wound care services. In 2016, the Center was in the top 5% of all Healogics centers for rates of healing, and received the prestigious President’s Circle Award. “We are proud to provide our community with the highest level of chronic wound treatment available,” said Joey C. Papa, MD, General Surgeon and Medical Director of the Wound Care Center. “We achieve this level of care by keeping abreast of emerging products and technologies and providing comprehensive services that enable our patients to seamlessly transition from the Center to home for the best outcomes.”

At the Wound Care Center, specialists in general, vascular, colorectal and trauma surgery, infectious diseases and podiatry work with physician assistants, nurses and social workers to provide a comprehensive range of state-of-the-art services: wound evaluation with diagnostic assessment; non-invasive vascular studies; leading-edge wound therapies; debridement; biologic and biosynthetic dressings; growth factor therapies; hyperbaric oxygen therapy; and negative pressure wound therapies.

Clinical care is augmented by extensive social, education and counseling support. “Patients with chronic wounds typically suffer from pain, a restricted lifestyle, loss of mobility, powerlessness, and a variety of coping challenges,” said Dr. Papa. “Our physicians and veteran nursing staff excel at helping our patients navigate their health and wound-specific issues as well as any socioeconomic barriers to healing.”

Patients are referred to the Wound Care Center for any acute wound (including large cuts, skin tears and chronic wounds) that has not healed in 30 days (commonly experienced in people with diabetes or vascular disease), a surgical wound that has opened or become infected, or a sore with increasing pain, redness, swelling, foul odor or a change in color.

For more information about the Stamford Health Wound Care and Hyperbaric Center call 203.276.2486.

The Editor’s Conversation:  Joey C. Papa, MD, General Surgeon & Medical Director
Stamford Health Wound Care and Hyperbaric Center

Have you noticed an increase in the incidence of chronic wounds, and if so, what are the contributing factors? Yes, we have seen an increase of chronic wounds because of the increasing age of the population in general, as well as an increase in morbid obesity and diseases associated with chronic wounds such as diabetes and poor circulation.

What are the latest developments in chronic wound care? We have come a long way in our understanding of how chronic wounds occur on a molecular level and how to add elements that disrupt the chronic wound cycle and encourage the wound to begin the repair process. The next phase is understanding where the cellular breakdown occurs, and intervening with targeted products such as skin substitutes, so that we are not behind the eight ball grappling with a stalled or non-healing wound.

What do you find most satisfying about your work at the Center? As a surgeon, the vast majority of my days are spent working with my patients who have an isolated issue that will heal with a straightforward surgery, and often are only seen once or twice after their discharge, and who are asleep during the most critical part of my care for them. My work at the Center allows me to talk to patients and family members, often for extended periods of time over many weeks. This offers me unique insight into my patients’ lives that I don’t typically experience in my private practice.

I believe there is an art to wound healing that involves understanding the type of care and what products will work best for a patient, the patient’s ability to apply products and self-care at home, as well as the patient’s socioeconomic situation including the home environment and ability to pay for treatment. It is satisfying to be able to see when patients are getting better as a consistent reminder of this skill.

What do you envision for the Center over the next five years? We are constantly trying to expand the scope of practice and encourage the community to utilize our expertise sooner and more often. We don’t want anyone to suffer with a chronic wound. If we can see it early and intervene appropriately, patients get better faster.
A Warm Welcome to James A. Lee, MD, Chief of Endocrine Surgery

The Department of Surgery extends a warm welcome to James A. Lee, MD, Chief of Endocrine Surgery at Stamford Health. Dr. Lee is also the Edwin K. and Anne C. Weiskopf Associate Professor of Surgical Oncology at Columbia University Medical Center, and Physician Director of the Endocrine Service Line at NewYork-Presbyterian Hospital. He brings national and internationally recognized expertise in surgical therapies for parathyroid, thyroid and adrenal diseases to Stamford Health. Dr. Lee’s office is located at 292 Long Ridge Road in Stamford. To schedule an appointment with Dr. Lee, please call 203.276.2437.

New Role for Carla Rennie, MSN, RN, Surgery Administration, Surgery Programs and Surgery Liaison

The Department of Surgery congratulates Carla P. Rennie, MSN, RN, for her new role as Director, Surgery Administration, Surgery Programs and Surgery Liaison. In addition to her continuing responsibilities in surgery administration and surgery programs, Carla now serves as a liaison between active staff surgeons and Stamford Hospital, helping to expedite workflow and ensure the smooth operation of the surgery program. Furthermore, in addition to overseeing the National Surgical Quality Improvement Program (NSQIP) and Trauma Quality Improvement Program (TQIP), Carla now oversees the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP).

Stamford Hospital Re-Verified as a Level II Trauma Center

Stamford Health is proud to announce the American College of Surgeons (ACS) re-verified Stamford Hospital as a Level II Trauma Center for another three years. Stamford Hospital is one of only seven hospitals to hold the Level II Trauma designation from the Office of Emergency Medicine in Connecticut.

As a Level II Trauma Center, Stamford Health provides 24-hour immediate coverage by highly trained trauma surgeons and physicians specializing in emergency medicine, anesthesiology, neurosurgery, orthopedic surgery, radiology, critical care and trauma-trained nurses. Additionally, as a Level II Trauma Center, Stamford Health is committed to trauma prevention, continuing education of the trauma team members and continued improvement in trauma care through a comprehensive quality assessment and performance improvement program.

The ACS Level II Trauma Center re-verification process occurs every three years to ensure optimal care is given to trauma patients. The process includes an extensive ACS on-site review of the hospital’s education and professional development, standards of care, quality of patient care and assessment of outcomes.

The majority of the physicians on the Stamford Hospital Medical Staff are not employees or agents of the Hospital. They are independent practitioners who have been granted the privilege of using the Hospital’s facilities for the care and treatment of their patients. This includes, but is not limited to, emergency department physicians, anesthesiologists, radiologists, surgeons, cardiologists, obstetricians, pathologists and other consultants who may treat patients.

Insurance listings are subject to change at any time. Please verify insurance plan acceptance when scheduling an appointment with a healthcare provider.