Patients First
Quality counts when referring patients to hospitals and physicians, so Cleveland Clinic has created a series of Outcomes books similar to this one for many of its institutes. Designed for a healthcare provider audience, the Outcomes books contain a summary of our surgical and medical trends and approaches, data on patient volume and outcomes, and a review of new technologies and innovations.

Although we are unable to report all outcomes for all treatments provided at Cleveland Clinic — omission of outcomes for a particular treatment does not mean we necessarily do not offer that treatment — our goal is to increase outcomes reporting each year. When outcomes for a specific treatment are unavailable, we often report process measures that have documented relationships with improved outcomes. When process measures are unavailable, we report volume measures; a volume/outcome relationship has been demonstrated for many treatments, particularly those involving surgical technique.

Cleveland Clinic also supports transparent public reporting of healthcare quality data and participates in the following public reporting initiatives:

- Joint Commission Performance Measurement Initiative (www.qualitycheck.org)
- Centers for Medicare and Medicaid (CMS) Hospital Compare (www.hospitalcompare.hhs.gov)
- Leapfrog Group (www.leapfroggroup.org)
- Ohio Department of Health Service Reporting (www.odh.state.oh.us)

Our commitment to providing accurate, timely information about patient care is designed to help patients and referring physicians make informed healthcare decisions. We hope you find these data valuable. To view all our Outcomes books, visit Cleveland Clinic's Quality and Patient Safety website at clevelandclinic.org/quality/outcomes.
Dear Colleague:

I am proud to present the 2007 Cleveland Clinic Outcomes books. These books provide information on results, volumes and innovations related to Cleveland Clinic care. The books are designed to help you and your patients make informed decisions about treatments and referrals.

Over the past year, we enhanced our ability to measure outcomes by reorganizing our clinical services into patient-centered institutes. Each institute combines all the specialties and support services associated with a specific disease or organ system under a single leadership at a single site. Institutes promote collaboration, encourage innovation and improve patient experience. They make it easier to benchmark and collect outcomes, as well as implement data-driven changes.

Measuring and reporting outcomes reinforces our commitment to enhancing care and achieving excellence for our patients and referring physicians. With the institutes model in place, we anticipate greater transparency and more comprehensive outcomes reporting.

Thank you for your interest in Cleveland Clinic's Outcomes books. I hope you will continue to find them useful.

Sincerely,

Delos M. Cosgrove, MD
CEO and President
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Chairman’s Letter

On behalf of Cleveland Clinic's Dermatology and Plastic Surgery Institute, we are pleased to share our 2007 Outcomes book. Our physicians and staff are dedicated to continuously improving both the quality of our medical, surgical and aesthetic services, and to adding value to the patient care experiences in our practices.

Major advances in the prevention and treatment of skin cancers, aging skin and restorative and rejuvenating plastic surgery have created an exciting environment in dermatology and plastic surgery. Our Institute’s refinement of microvascular surgical advances in breast reconstruction and research in composite tissue allograft transplants will lead the future breakthroughs in plastic and reconstructive surgery.

We hope that the information in this Outcomes book will serve as a valuable tool and reinforce your confidence in the quality of care our Institute offers. We consider you a partner in the care of your patients and will continue to improve our communications with you regarding your patient’s diagnosis, treatment options and outcomes. Please contact us about your experiences and let us know how we can better serve you.

Frank A. Papay, MD, FACS
Chairman, Cleveland Clinic Dermatology and Plastic Surgery Institute
Institute Overview

The establishment of the Dermatology and Plastic Surgery Institute provides new opportunities for innovation in clinical research, physician education and healthcare management. Both specialties offer avenues for cross fertilization to create new standards in state-of-the-art care of patients requiring dermatological, plastic surgical and aesthetic services. The integration of dermatology and plastic surgery into an Institute will enhance the residency and fellowship programs by revealing new discoveries from both fields. Residents and fellows will have the opportunity to become future leaders in their fields, thanks to the institute’s interdisciplinary approach to education, research and patient care.

The Cleveland Clinic Dermatology and Plastic Surgery Institute offers services in several specialty areas, including clinical and cosmetic dermatology; dermatopathology, dermatologic surgery and cutaneous oncology; Mohs micrographic surgery and reconstruction; pediatric dermatology; industrial and environmental dermatology; facial cosmetic surgery; cosmetic breast surgery and breast reconstruction; body contouring, including liposuction and plastic surgery after massive weight loss; pediatric plastic surgery; hand surgery; microsurgery; complex wound repair and reconstruction after cancer.

Dermatologists and/or plastic surgeons are located in 11 sites throughout Northeast Ohio: Cleveland, Beachwood, Chagrin Falls, Independence, Lorain, Strongsville, Solon, Westlake, Willoughby Hills, Wooster and Lutheran Hospital.

The Department of Dermatology provides expertise in the diagnosis and management of the full spectrum of dermatologic conditions. One of the fastest-growing services is also one of the oldest: Mohs micrographic surgery. Mohs micrographic surgery provides the highest cure rate for high-risk nonmelanoma skin cancers, while sparing the maximum amount of normal skin. Cleveland Clinic dermatologists performed approximately 2,100 Mohs procedures in 2007 and now offer the surgery in Independence and Beachwood, in addition to the main campus. Access at more locations affords patients more timely treatment of skin cancer.

The department continues to meet community responsibilities by participating actively in the Skin Cancer Screening Day and in other activities related to National Skin Cancer Week. In addition to several health talks and other community events, the department participated in six free skin cancer screenings, all staffed by Cleveland Clinic Dermatology staff, residents and physicians’ assistants.

The move to the institute model of care has created an ideal opportunity to build synergies between Dermatology and Plastic Surgery in the areas of aesthetic facial plastic surgery and cosmetic dermatology. This collaboration will enable patients to obtain the best from both specialties.

For the past several years, the Department of Plastic Surgery has focused on minimally invasive techniques in facial cosmetic surgery. This includes alternatives to face and necklift surgery, short-scar facelifts and minimally invasive facelift techniques. Surgeons continue to collect and objectively measure data on these procedures, and to publish results in peer-reviewed plastic surgery journals.
The department has made significant progress in objectifying surgical results in other areas, including cosmetic breast surgery and reconstructive surgery for breast cancer. Cleveland Clinic plastic surgeons offer numerous methods of breast reconstruction that can be performed either at the time of mastectomy or as a secondary procedure. These techniques include breast implants and expanders; pedicled transverse rectus abdominis myocutaneous (TRAM) flaps (abdominal skin and muscle); and free-tissue transfers, such as the deep inferior epigastric perforator (DIEP) flap. The DIEP flap minimizes injury to the abdominal wall while providing an ideal breast reconstruction using the patient's own tissue. This procedure is performed in large numbers at only a few centers in the United States.

In addition to standard body contouring techniques, including abdominoplasty and a wide variety of liposuction techniques, the Department of Plastic Surgery is particularly interested in plastic surgery after significant weight loss.

The department also includes three staff surgeons with Certificates of Added Qualifications in hand surgery and four plastic surgeons with extensive microsurgery experience. This provides a team adept at handling all types of traumatic, congenital and work-related hand, peripheral nerve and other upper-extremity problems.

Finally, pediatric surgery and craniofacial surgery are especially strong specialties in this department. The head of the Section of Pediatric Plastic Surgery and Craniofacial Surgery has more than 15 years of experience with these rare problems.

The Dermatology and Plastic Surgery Institute is poised for the challenges of 2008 and beyond, with planned growth on both the main campus and in our suburban locations.
Dermatology

One of our fastest-growing services is also one of our oldest: Mohs micrographic surgery for skin cancer. By streamlining our Mohs laboratory processes, extending surgical hours and adding the availability of Mohs surgery at our Beachwood and Independence offices, we have achieved a significant increase in the number of cases performed over the previous year. This has provided faster access to treatment for patients with skin cancer.

**Yearly Number of Mohs procedures**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Procedures</th>
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<tbody>
<tr>
<td>2003</td>
<td>1000</td>
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<td>2004</td>
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<td>2006</td>
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<td>2007</td>
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Taking advantage of the latest technology in UVA1 phototherapy, such as light boxes and the excimer laser, the Light Therapy Unit saw a significant increase in the number of patients served.

**Yearly Number of Phototherapy / Ultraviolet Light Treatments**

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<tr>
<th>Year</th>
<th>Number of Treatments</th>
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<td>2007</td>
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The Department of Dermatology continues to upgrade and improve our laser program services in order to provide one of the most comprehensive lines of laser services in Northeast Ohio. Services include treatment with the Smoothbeam laser for acne and skin contouring, the Vbeam laser for vascular lesions, the erbium and carbon dioxide lasers for skin resurfacing and lesion removal, the VersaPulse laser for the treatment of pigmented lesions, tattoos and blood vessels of the face and legs, the alexandrite and YAG lasers for hair removal and the Affirm laser for fractional nonablative skin contouring. Varicose veins and spider veins are treated with laser and/or sclerotherapy treatments.

**Yearly Number of Laser Treatments**

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<td>2007</td>
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Yearly Number and Type of Facial Cosmetic Surgeries

Yearly Number of Primary and Secondary Rhinoplasties

Yearly Number and Type of Cosmetic Breast Surgeries
Yearly Number and Type of Body Contouring Procedures

Yearly Number and Type of Breast Reconstruction Procedures
Yearly Number of Breast Reconstruction Microsurgeries

Yearly Number of Endoscopic and Open Carpal Tunnel Surgeries
Surgical Treatment for Peripheral Neuropathy

Surgical decompression of peripheral nerves has been performed on patients with both lower and upper-extremity peripheral neuropathy and in diabetic as well as nondiabetic patients. Treated nerves in the lower extremities included the common peroneal nerve, the deep peroneal nerve, the superficial peroneal nerve and the posterior tibial nerve. In the upper extremities, treated nerves included the ulnar and median nerves. Clinical evaluation and preoperative quantitative sensory testing were used to identify patients who would benefit from surgery.

Most patients in the nondiabetic group had lower-extremity neuropathy of undetermined etiology or secondary to injury.

Percentages of Nondiabetic and Diabetic Patients Who Underwent Surgical Nerve Decompression in 2007 (N = 62)

Number and Types of Nerves Decompressed in 2007

A total of 224 nerves were surgically decompressed in the 62 patients.
Following surgical decompression of the common peroneal nerve at the neck of the fibula, improvements were seen in the muscle power of the extensor hallucis longus and the extensor hallucis brevis.

**Improvements in Muscle Strength**

<table>
<thead>
<tr>
<th>Mean Muscle Power</th>
<th>Extensor Hallucis Longus</th>
<th>Extensor Hallucis Brevis</th>
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**Clinical Outcomes (N = 62)**

- **14%** Fair
- **34%** Good
- **52%** Excellent

The clinical outcome was satisfactory in 86% of patients over a mean duration of 8.3 months. Clinical outcome was determined on the basis of the level of postoperative pain, the use of neuropathic and narcotic pain medications, the time to return of sensation, improvement in walking distance and the time to return to work.
Reconstructive Surgery

Microsurgical Breast Reconstruction: The Deep Inferior Epigastric Perforator Flap

Breast cancer patients who need mastectomy as part of their treatment have several options for reconstruction of their missing breast tissue. The two most common and widely known methods are (1) placement of implants and (2) reconstruction with a TRAM flap. The TRAM flap, which makes use of the patient’s own tissue, requires the use of abdominal fat tissue and muscle.

Recent advances in breast reconstruction include a variation of the TRAM operation that allows for preservation of the rectus abdominis muscle. This technique is called DIEP (for deep inferior epigastric perforator) free-flap reconstruction. It involves meticulous dissection of the vessels within the rectus abdominis muscle from their distal perforation through the rectus fascia and all the way down to their proximal pedicle off the external iliac artery and vein. Once these vessels are identified and isolated, they are transected and re-anastomosed to the internal mammary or thoracodorsal vessels. This anastomosis requires a microsurgical operation to re-establish perfusion to the flap. To complete the reconstruction, the flap is secured and tailored to form a new reconstructed breast. Since this procedure is dedicated to the preservation of muscle, most patients experience less discomfort than do patients who undergo procedures that involve taking the rectus muscle.

Success/Failure Rates for DIEP

![Success/Failure Rates for DIEP](image)

Yearly Number of DIEP Flap Reconstruction Surgeries

![Yearly Number of DIEP Flap Reconstruction Surgeries](image)
Figure 1:
A. Preoperative DIEP flaps, left and right breasts, left breast side view.
B. Postoperative bilateral mastectomies immediately reconstructed with DIEP free flaps on both sides, left breast side view.
C. Preoperative DIEP flap, left breast, and preoperative mastopexy, right breast, front view.
D. Postoperative DIEP flap, left breast with nipple reconstruction, and postoperative mastopexy, right breast, front view.
E. Preoperative DIEP flap, front view, torso.
F. Postoperative DIEP flap, front view, torso.
Breast Reconstruction in Nipple-Sparing Mastectomy

During the past decade, the traditional modified radical mastectomy has evolved to become skin-sparing mastectomy. In radical modified mastectomy, the surgeon removes the cancerous tissue in the breast along with the remainder of the breast tissue and nipple areola complex through an incision around the nipple. This procedure has been further refined to become what is known as skin-sparing mastectomy.

In general, there are two major options for breast reconstruction following a mastectomy: autologous tissue reconstruction and nonautologous reconstruction. In autologous reconstruction, the breast mount is reconstructed by using the patient’s own tissue. The most common tissue used for this purpose is adipose (fat) tissue taken from the abdomen. In the nonautologous procedure, the reconstruction is accomplished by using a tissue expander and implant material. In the current technique, the plastic surgery team at Cleveland Clinic has employed two-stage reconstruction by using tissue expander placement immediately after the mastectomy followed by exchange of the expander to an implant material of choice. At times, a single-stage reconstruction after a mastectomy can be attempted by direct placement of the implant.

The Department of Plastic Surgery at Cleveland Clinic, in conjunction with the Breast Center, is conducting a review of results based on our seven-year experience in performing breast reconstruction via nipple-sparing mastectomy in 137 patients. For this institutional review board–approved study, charts were reviewed and patients were contacted by letter and asked to complete mail-in questionnaires. Of the 65 patients who responded, 32 said that they would definitely undergo the procedure again if indicated.

Figure 2:

A. Preoperative bilateral mastectomies, right breast side view with short scar from a lumpectomy.

B. Postoperative nipple-sparing mastectomies reconstructed with implants, right breast side view.

C. Preoperative bilateral mastectomies, front view.

D. Postoperative nipple-sparing mastectomies reconstructed with implants, front view.
Neck Correction Procedures

Cultural shifts during the past decade have changed some paradigms in plastic surgery. Emerging trends show that patients want shorter recovery times, less morbidity and more immediate results. It’s about looking younger faster by targeting specific areas. Based on our experience, the neck has become a new area of concern. A number of alternative procedures to traditional facelift surgery are available, including minimally invasive facelifts and neck lifts without incisions in the front or back of the ear. More and more patients are willing to accept more subtle changes rather than undergoing invasive procedures. In elderly patients, neck correction is providing significant neckline improvement when it is performed in the appropriate surgical candidates. Neck correction is associated with less morbidity than is traditional facelift surgery.

Types of Neck Correction Procedures, 1997-2007 (N = 42)

![Bar chart showing types of neck correction procedures from 1997 to 2007]

- Anterior Lipectomy and Platysmaplasty: 30 procedures
- Direct Excision: 20 procedures
- Submental Liposuction: 10 procedures
Submental Liposuction

The ideal candidate for submental liposuction is a patient younger than 40 years who has good skin elasticity, mild skin excess and a mild to moderate amount of fat in the submental and submandibular areas. A blunt cannula is generally inserted through a very small and well-concealed submental incision. Superficial fat is then suctioned, and the skin is allowed to re-drape over the new and improved neck contour.

Figure 3:
A. Preoperative front view of a 35-year-old woman with a moderate amount of fat in the submental area and a weak chin.
B. Postoperative front view.
C. Preoperative profile view before submental liposuction and chin augmentation.
D. Postoperative profile view.
Neck Lift without Incision in Front of or Behind the Ear
(Anterior Lipectomy and Platysmaplasty)

Our Plastic Surgery Department has highlighted this technique over the past several years and has published these results in the plastic surgery literature. This operation is most effective in middle-aged men and women with mild to moderate skin excess and/or skin laxity. These patients need to be carefully evaluated and their desires carefully reviewed. These patients will have most noticeable change in the profile view. They will have little change in the mid face. For patients desiring changes in the mid or upper face, a traditional facelift operation is more appropriate.

In objectively reviewing our long-term results, we classified patients before and after surgery according to the following paradigm:

Grade I  Ideal neck line
Grade II  Mild neck aging
Grade III  Moderate neck aging
Grade IV  Severe neck aging

Results:
From 1997 through 2007, 29 patients underwent neck lift without incisions in front of or behind the ear. Of the 29 patients, all improved one to two grades.

Anterior Lipectomy and Platysmaplasty
Figure 4:
A. Preoperative front view of a 45-year-old woman with a grade II neck deformity.
B. Postoperative front view.
C. Preoperative profile view before anterior lipectomy and platysmaplasty.
D. Postoperative profile view.
Figure 5:
A. Preoperative front view of a 73-year-old woman with a grade III neck deformity.
B. Postoperative front view.
C. Preoperative profile view before anterior lipectomy and platysmaplasty.
D. Postoperative profile view.

Complications:
Complications following neck lift without preauricular incision have been minor. They have included occasional neck irregularities that resolve with time. One patient ultimately underwent traditional facelift surgery.
Direct Excision with Z-plasty

In elderly men and women, the direct excision of neck skin and Z-plasty significantly improves the neck contour, especially in the profile, with significantly less downtime and surgical risk when compared to traditional facelift surgery. In addition, those patients with a significant amount of skin excess will obtain an even better neck contour than those patients undergoing traditional facelift surgery because the skin excision will be in the area where laxity is the greatest.

The tradeoff is a scar in the neck area. While the scar generally heals well, its permanence must be fully discussed with the patient before surgery. It is most helpful to show these patients before-and-after photographs, including images of the neck scar itself.

This operation generally is performed in men and women who are 70 or older. It is also an operation used in patients following massive weight loss.
Surgical Quality Improvement

Surgical Care Improvement Program (SCIP)

SCIP is a national campaign aimed at reducing surgical complications by 25 percent by the year 2010. SCIP is sponsored by the Centers for Medicare and Medicaid Services (CMS) in collaboration with a number of other national partners serving on the steering committee, including the American Hospital Association (AHA), Centers for Disease Control and Prevention (CDC), Institute for Healthcare Improvement (IHI), The Joint Commission and others. Cleveland Clinic is committed to improving the care of surgical patients and participates in SCIP. A multidisciplinary team including the Surgery Institute, Anesthesiology Institute, Infectious Disease Department, Nursing Institute, and Quality and Patient Safety Institute works together to ensure that our surgical patients receive appropriate care.

Appropriate Preoperative Prophylactic Antibiotic Timing 2007

* Source:
United States Department of Health and Human Services, Hospital Compare
Most current reported discharges July 2006 to June 2007.
“Top Hospitals” represent the top 10 percent of reporting hospitals nationwide.
National average of all reporting hospitals in the United States.

Appropriate Prophylactic Antibiotic Selection 2007

* Source:
United States Department of Health and Human Services, Hospital Compare
Most current reported discharges July 2006 to June 2007.
“Top Hospitals” represent the top 10 percent of reporting hospitals nationwide.
National average of all reporting hospitals in the United States.
Recommended Venous Thromboembolism Prophylaxis Received by Patient 2007

* Source:
United States Department of Health and Human Services, Hospital Compare
Most current reported discharges January 2007 to June 2007.
“Top Hospitals” represent the top 10 percent of reporting hospitals nationwide.
National average of all reporting hospitals in the United States.

Prophylactic Antibiotics Discontinued within 24 Hours After Surgery 2007

* Source:
United States Department of Health and Human Services, Hospital Compare
Most current reported discharges July 2006 to June 2007.
“Top Hospitals” represent the top 10 percent of reporting hospitals nationwide.
National average of all reporting hospitals in the United States.
Recommended Venous Thromboembolism Prophylaxis Ordered 2007

- **Cleveland Clinic**
- **National Average**
- **Top Hospitals**


Surgery Patients Who Received their Beta Blocker Perioperatively 2007

*Cleveland Clinic*

*No national benchmark data available at this time*
Patient Experience

Outpatient - Dermatology and Plastic Surgery Institute

We ask our patients about their experiences and satisfaction with the services provided by our staff. Although our patients are already indicating we provide excellent care, we are committed to continuous improvement.

Overall Rating of Care 2007

Overall Rating of Provider Care 2007
Would Recommend Provider 2007

![Bar chart showing the distribution of responses to the question: Would you recommend this provider? Categories include Extremely Likely, Very Likely, Somewhat Likely, Somewhat Unlikely, and Very Unlikely. The chart indicates that the majority of respondents chose Extremely Likely, with other categories having much lower percentages. The sample size is N=1583.]
Face Forward

If it weren't for baby pictures, 3-year-old Grace Lesnak would never know she was born with a large hemangioma that marred her otherwise perfect face. Thanks to laser treatments at Cleveland Clinic, the red strawberry was gone before she took her first step.

A dermatologist in her hometown of Ravenna, Ohio, referred Grace, then just 4 months old, to Allison Vidimos, RPh, MD, chair of the Dermatology Department. Dr. Vidimos immediately began a series of treatments, scheduled one month apart, in Cleveland Clinic's state-of-the-art laser unit, which rendered the large birthmark a faint shadow.

Grace’s parents couldn’t be happier, referring to Dr. Vidimos as an angel. “Being a kid is tough enough. We didn’t want a birthmark to make it even harder,” her mother says.
Innovations

Dermatology

Photodynamic therapy (PDT) using the Bluelight for treatment of precancerous actinic keratoses, acne and skin rejuvenation is available at main campus and the Independence Family Health Center. Studies are under way to investigate PDT for the treatment of psoriasis and cutaneous T cell lymphoma.

The laser unit offers state-of-the-art care with a dozen ablative and nonablative lasers for treatment of scars and wrinkles, tattoo removal, treatment of vascular lesions (e.g., port wine stain birthmarks and hemangiomas), hair removal and treatment of telangiectasias of the face and legs and pigmented lesion removal. The Affirm Laser provides the newest fractionated laser technology to treat skin contour irregularities.

The Dermatopathology Reading Room was completed by July 2007. The 18-headed microscope, computer access to Epic and the Internet and two projection screens have dramatically improved the rapidity and quality of slide interpretations, as well as the education of the fellows and residents. The dermatopathologist has the opportunity to examine lesions or rashes on the patient prior to receiving the specimen the following day.

Additionally, some new clinical studies that are occurring in Dermatology include:

- a pilot study exploring the rejuvenation of the lower eyelid using a combination of two hyaluronic acid fillers
- determination of ideal aminolevulinic acid exposure time for photodynamic therapy of actinic keratoses
- uveal melanoma and atypical nevus syndrome
- efficacy of subcutaneous phosphatidylcholine and deoxycholate injections for localized fat removal

Plastic Surgery

In 2006 the Department of Plastic Surgery significantly increased its microsurgical expertise by recruiting two additional microsurgeons to the team. With these additions, the department has rapidly increased the numbers of microsurgical reconstructive procedures for breast cancer using the deep inferior gastric perforator (DIEP) flap. More than 70 patients underwent this procedure in 2007.

The DIEP flap minimizes the damage to the abdominal wall caused by other autogenous (the patient’s own skin and subcutaneous tissue) breast reconstruction techniques. In the more widely used and traditional transverse rectus abdominis myocutaneous (TRAM) operation, one and occasionally two muscles of the abdomen are used to reconstruct the breast. While this can be done consistently and effectively, it can result in hernias, bulges and, especially when two muscles are used, significant weakness of the abdomen. These patients are then unable to perform sit-ups and other vigorous activities. The DIEP flap may prove to minimize these adverse effects while affording excellent and natural autogenous reconstruction.

In concert with the Department of General Surgery, the Department of Plastic Surgery has established an ongoing protocol for multidisciplinary treatment of breast defects following conservative resections for breast cancer (partial mastectomy defects). These procedures are done at the time of the general surgeon’s excision of the breast tumor when the general surgeon feels that a more complex reconstruction would be advisable to minimize deformity resulting from partial mastectomy resection.

The facelift operation is the mainstay for the correction of facial aging. However, there is clearly a subset of patients who would benefit from a lesser procedure. Anterior lipectomy and platysmaplasty is an operation that has been popularized by our plastic surgery staff. This procedure has recently been published by our team in the plastic surgery literature. The operation results in improvement predominantly in the profile with little change in the mid face. A variety of minimally invasive facelifts have been added to our plastic surgery armamentarium. These techniques are currently undergoing rigorous outcomes analyses to assess their duration of efficacy, complications and patient satisfaction.
Ongoing protocols are in place in a variety of aesthetic surgery procedures including brow lift, abdominoplasty, facelift, breast augmentation and breast reduction surgery to minimize postoperative pain, nausea and vomiting. This involves the use of a self-administering, continuous infusion catheter placed at the time of surgery. Through this continuous infusion catheter a long-acting, local anesthetic is used to minimize postoperative pain. As numbers of patients entered into our outcomes study increase, significant reduction in pain has been seen in breast reduction and abdominoplasty patients.

With this two-year laboratory and cadaver dissection behind us, we are now approaching the time when we feel that the team is ready and thoroughly trained for this highly controversial transplant to become a reality.

Additionally, Dr. Siemionow has been awarded a grant from the Armed Forces Institute for Regenerative Medicine (AFIRM) for the following studies:

1) Optimizing nerve conduit scaffolds for the repair of segmental nerve defects
2) Composite tissue allograft transplantation without lifelong immunosuppression

**Dermatology and Plastic Surgery Anesthesiology**

Anesthesiologists of the Section of Ambulatory Anesthesia improved patient safety by introducing the new “glide scope” technique to supplement conventional fiberoptic methods for difficult intubations. They also innovated their practice by employing new ultrasound-guidance technology for nerve block placement in upper extremity and other plastic surgery procedures.

In a critically important research endeavor, this section’s anesthesiologists are conducting a clinical trial to determine if adding regional anesthesia to traditional general anesthesia techniques can decrease breast cancer recurrence after mastectomy.
New Knowledge

Journal Articles


Amado A, Jacob SE. Dermatitis de contacto por alimentos [Contact dermatitis to foods] [Spanish]. Actas Dermosifiliogr. 2007 Sep;98(7):452-458.


Trost LB, Bergfeld WF. Reply [Iron and hair loss in women; what is deficiency? This is the real question!]. *J Am Acad Dermatol.* 2007 Mar;56(3):519.


**Book Chapters**


Dermatology and Plastic Surgery Anesthesiology


Staff Listing

**Dermatology and Plastic Surgery Institute**
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Melissa Piliang, MD, Co-Director

**Section of Industrial Dermatology**
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**Section of Clinical Research**
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**Cutaneous Care Center**
Jonelle McDonnell, MD

**Molecular Dermatology**
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**Family Health and Surgery Center Physicians**

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**Westlake**
John Krebs, MD

**Willoughby Hills**
Ursula Stanton-Hicks, MD
Abena Ofori, MD

**Wooster**
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Department of Plastic Surgery
James E. Zins, MD, Chairman

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Risal S. Djohan, MD
Mark F. Hendrickson, MD
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Randall J. Yetman, MD
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Randall J. Yetman, MD

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Lorain
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Lutheran Hospital
Mark F. Hendrickson, MD

Solon
Mark F. Hendrickson, MD
Raymond Isakov, MD

Strongsville
Risal S. Djohan, MD
Shashidhar Kusuma, MD

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Walter Maurer, MD, Section Head
Harendra Arora, MD
Charanjit Bahniwal, MD
Raymond Borkowski, MD
Thomas Bralliar, MD
J. Michael DeUngria, MD
Joseph Foss, MD
Ursula Galway, MD
Brock Gretter, MD
Robert Helfand, MD
Maria Inton-Santos, MD
Tatiana Kopyeva, MD
Priya Kumar, MD
R. Michael Ritchey, MD
Stacy Ritzman, MD
Peter Schoenwald, MD
Sara Spagnuolo, MD
Karen Steckner, MD

Some physicians may practice in multiple locations. For a detailed list including staff photos, please visit clevelandclinic.org/staff.
Contact Information

General Patient Referral
24/7 hospital transfers or physician consults
800.553.5056

General Dermatology Appointments/Referrals
216.444.5725 or 800.223.2273 ext. 45725

Surgical Dermatology Appointments/Referrals
216.444.5724 or 800.223.2273, ext. 45724

Cutaneous Care Center
216.444.2649 or 800.223.2273, ext. 42649

Dermatology Clinical Research
216.445.8454 800.223.2273, ext. 58454

Dermatology Financial Counselor
216.445.8662 or 800.223.2273, ext. 58662

Plastic Surgery Appointments/Referrals
216.444.6900 or 800.223.2273 ext. 46900

Plastic Surgery Financial Counselor
216.445.1331 or 800.223.2273, ext. 51331

On the Web at:
clevelandclinic.org/dermatology and clevelandclinic.org/plastics

Additional Contact Information

General Information
216.444.2200

Hospital Patient Information
216.444.2000

Patient Appointments
216.444.2273 or 800.223.2273

Special Assistance for Out-of-State Patients
Complimentary assistance for out-of-state patients and families
800.223.2273, ext. 55580, or email medicalconcierge@ccf.org

International Center
Complimentary assistance for international patients and families
800.884.9551 or 001.631.439.1578 or visit clevelandclinic.org/ic

Cleveland Clinic in Florida
866.293.7866

For address corrections or changes, please call 800.890.2467
Institute Locations

Main Campus
9500 Euclid Avenue
Cleveland, OH 44195

Beachwood Family Health and Surgery Center
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Beachwood, OH 44122
Dermatology and Plastic Surgery: 216.839.3000

Chagrin Falls Family Health Center
551 E. Washington St.
Chagrin Falls, OH 44022
Dermatology: 440.893.9393

Independence Family Health Center
5001 Rockside Road
Crown Center II
Independence, OH 44131
Dermatology and Plastic Surgery: 216.986.4000

Lorain Family Health and Surgery Center
5700 Cooper Foster Park Road
Lorain, OH 44053
Dermatology and Plastic Surgery: 440.204.7400

Lutheran Hospital
1730 West 25th St.
Cleveland, OH 44113
Plastic Surgery: 216.363.2311

Solon Family Health Center
29800 Bainbridge Road
Solon, OH 44139
Plastic Surgery: 440.519.6800

Strongsville Family Health and Surgery Center
16761 SouthPark Center
Strongsville, OH 44136
Dermatology and Plastic Surgery: 440.878.2500

Westlake Family Health Center
30033 Clemens Road
Westlake, OH 44145
Dermatology and Plastic Surgery: 440.899.5555

Willoughby Hills Family Health Center
2570 SOM Center Road
Willoughby Hills, OH 44094
Dermatology: 440.943.2500

Cleveland Clinic Wooster
1739 Cleveland Road
Wooster, OH 44691
Dermatology: 330.287.4500
Cleveland Clinic Overview

Cleveland Clinic, founded in 1921, is a nonprofit multispecialty academic medical center that integrates clinical and hospital care with research and education. Today, 1,800 Cleveland Clinic physicians and scientists practice in 120 medical specialties and subspecialties, annually recording more than 3 million patient visits and more than 70,000 surgeries.

In 2007, Cleveland Clinic restructured its practice, bundling all clinical specialties into integrated practice units called institutes. An institute combines all the specialties surrounding a specific organ or disease system under a single roof. Each institute has a single leader and focuses the energies of multiple professionals onto the patient. From access and communication to point-of-care service, institutes will improve the patient experience at Cleveland Clinic.

Cleveland Clinic’s main campus, with 37 buildings on 140 acres in Cleveland, Ohio, includes a 1,000-bed hospital, outpatient clinic, specialty institutes and supporting labs and facilities. Cleveland Clinic also operates 14 family health centers; eight community hospitals; two affiliate hospitals; a 150-bed hospital and clinic in Weston, Fla.; and health and wellness centers in Palm Beach, Fla., and Toronto, Canada. Cleveland Clinic Abu Dhabi (United Arab Emirates), a multispecialty care hospital and clinic, is scheduled to open in 2011.

At the Cleveland Clinic Lerner Research Institute, hundreds of principal investigators, project scientists, research associates and postdoctoral fellows are involved in laboratory-based research. Total annual research expenditures exceed $150 million from federal agencies, non-federal societies and associations, and endowment funds. In an effort to bring research from bench to bedside, Cleveland Clinic physicians are involved in more than 2,400 clinical studies at any given time.

In September 2004, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University opened and will graduate its first 32 students as physician-scientists in 2009.

Cleveland Clinic is consistently ranked among the top hospitals in America by *U.S. News & World Report*, and our heart and heart surgery program has been ranked No. 1 since 1995.

For more information about Cleveland Clinic, visit clevelandclinic.org.

Online Services

**eCleveland Clinic**

eCleveland Clinic uses state-of-the-art digital information systems to offer several services, including remote second medical opinions to patients around the world; personalized medical record access for patients; patient treatment progress for referring physicians (see below); and imaging interpretations by our subspecialty trained radiologists. For more information, please visit eclevelandclinic.org.

**DrConnect**

**Online Access to Your Patient’s Treatment Progress**

Whether you are referring from near or far, DrConnect can streamline communication from Cleveland Clinic physicians to your office. This online tool offers you secure access to your patient’s treatment progress at Cleveland Clinic. With one-click convenience, you can track your patient’s care using the secure DrConnect website. To establish a DrConnect account, visit eclevelandclinic.org or email drconnect@ccf.org.

**MyConsult**

**Remote Second Medical Opinion** is a secure online service providing specialist consultations and remote second opinions for more than 600 life-threatening and life-altering diagnoses. The MyConsult service is particularly valuable for people who wish to avoid the time and expense of travel. For more information, visit eclevelandclinic.org/myconsult, email eclevelandclinic@ccf.org or call 800.223.2273, ext 43223.
Cleveland Clinic is a nonprofit multispecialty academic medical center. Founded in 1921, it is dedicated to providing quality specialized care and includes an outpatient clinic, a hospital with more than 1,000 staffed beds, an education institute and a research institute.

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