



# Quill Publication Index

## Plastic Surgery



SUPPORTING  
SURGEONS  
ALWAYS

1. **PROGRESSIVE TENSION SUTURES IN ABDOMINOPLASTY.** POLLOCK T, POLLOCK H. CLINICS IN PLASTIC SURGERY. 2004(31); 583-589.

*“The authors describe a simple, safe, and effective way to reduce complications related to abdominoplasty. By using progressive tension sutures, a suture technique to advance and anchor the abdominal flap, they have routinely combined abdominal liposuction and abdominoplasty, with now resulting seroma formation or distal flap necrosis. No drains are used in this technique and early ambulation in an upright posture is encouraged.”*

2. **EVALUATION OF A NOVEL TECHNIQUE FOR WOUND CLOSURE USING A BARBED SUTURE.** MURTHA AP, KAPLAN AL, PAGLIA MJ, MILLS BB, FELDSTEIN ML, RUFF GL. PLASTIC AND RECONSTRUCTIVE SURGERY. 2006;117: 1769-1780.

*“Conclusions: The barbed suture represents an innovative option for wound closure. With a cosmesis and safety profile that is similar to that of conventional suture technique, it avoids the drawbacks inherent to suture knots.”*

3. **USING BARBED SUTURES IN OPEN/SUBPERIOSTEAL MIDFACE LIFT.** PAUL M. AESTHETIC SURG JOURNAL 2006; 26:725-732.

*“The author has found that the use of barbed sutures simplifies midface suspension not only by stacking elevated soft tissue, but also by providing the ability to adjust sutures postoperatively. Complications, such as breaking of sutures, malposition, and failure to maintain support have been rare in his practice.”*

4. **TECHNIQUE AND USES FOR ABSORBABLE BARBED SUTURES.** RUFF G. AESTHETIC SURGERY JOURNAL. 2006;26:620-628.

*“The author describes barbed sutures as a unique wound closure tool. Their advantages include the closure of wounds without any knots or the need for a third hand. They are also capable of shifting tissues differentially along the suture to redistribute tensile and compressive forces. The author discusses the development of these tools and their application.”*

5. **THE USE OF MODIFIED SUTURES IN PLASTIC SURGERY.** MATARASSO A, PFEIFER TM. PLASTIC AND RECONSTRUCTIVE SURGERY. 2008; 122: 652-658. DOI:10.1097/PRS.0B013E3181773982.

*“Conclusions: In addition to what has been described, the use of these sutures for wound closure and contouring in aesthetic body surgery is potentially the primary application of these sutures. In the areas of wound closure and body contouring, the use of these sutures may improve wound healing, reduce operative time, and facilitate closure of difficult wounds. The importance of ongoing studies to delineate the safety, efficacy, and indications for use of these products and techniques cannot be overstated. As these sutures continue to be studied, surgeons from many disciplines will continue to develop various applications for these sutures.”*

6. **MANAGEMENT OF THE OCCIPITAL SCALP TENSION WOUND IN HAIR TRANSPLANT SURGERY WITH THE QUILL SUTURE.** PAK JP, RIESMAN WR, GAZONAS P, ZEALOUS A. HAIR TRANSPLANT FORUM INTERNATIONAL. JULY/AUG 2008:149-150.

*No PDF copy available.*

**7. BARBED SUTURES FOR AESTHETIC FACIAL PLASTIC SURGERY: INDICATIONS AND TECHNIQUES.** PAUL MD. CLINICS IN PLASTIC SURGERY. 2008; 35:451-461.

*“In the evolution of facial rejuvenative procedures, the shift to less-invasive procedures with a reasonable half-life has been a reasonable goal. However, the use of nonabsorbable threads to achieve this goal met with mixed reviews. Understanding the technical maneuvers in effectively using bidirectional absorbable barbed sutures has allowed faster, secure placement of sutures with even distribution of tension and the ability to artistically support repositioned soft tissue in aesthetically correct vectors. This, of course, required surgical dissection at various planes to ensure an enduring correction. It really is all about vectors and volume, not about pulling the sheet over an unmodified mattress.”*

**8. KNOTLESS WOUND CLOSURE SAVES TIME, MONEY.** JANCIN B. SKIN & ALLERGY NEWS. 2009; 48.

*“Time is money. And with operation room time running \$30 per minute or more at many hospitals, some cosmetic surgeons are switching from the hallowed traditional stitching techniques to considerably faster knotless means of wound closure. Two novel technologies that garnered favorable reviews in studies presented at the annual meeting of the American Academy of Cosmetic Surgery were the Quill bidirectional barbed suture and 3M’s Steri Strip S device.”*

**9. REDUCING THE INCIDENCE OF EAR DEFORMITY IN FACELIFT.** MAN D. AESTHETIC SURGERY JOURNAL. 2009; 29(4): 264-271.

*“Results: Significant improvement of the specified angles was noted in 70% of cases following facelift surgery; in these cases, the ear position was elevated. No change in ear position occurred in 10% of cases. Some distortion and lowering of the ear was seen in the remaining cases.”*

*“Conclusions: Recognition of the effects of aging on the ear and the mechanisms leading to ear deformity associated with facelift procedures can aid in achieving improved aesthetic results. The advantages of the author’s technique include shorter incisions, a diminished need to remove redundant skin, ear elevation, and a smoother repair with improved contour. Further investigation of long-term results is necessary.”*

**10. EVALUATING THE QUILL SELF-RETAINING SYSTEM: CLOSURE TIME, COST ANALYSIS, AND CURRENT CLINICAL APPLICATIONS.** PAUL MD, BUDD M. PLASTIC SURGERY PRACTICE. MARCH 2009. 30-33.

*“Discussion. The Quill SRS wound-closure system eliminates the tedious and time-consuming step of tying suture knots in order to secure soft-tissue approximation. Our small study showed that, regardless of the surgeon’s experience level, the Quill SRS suture decreases operative time by slightly less or more than 50%, depending upon the procedure performed.”*

**11. BIDIRECTIONAL BARBED SUTURES FOR WOUND CLOSURE: EVOLUTION AND APPLICATIONS.** PAUL, M. JOURNAL OF THE AMERICAN COLLEGE OF CERTIFIED WOUND SPECIALISTS. 2009;1(2):51-57.

*“The introduction of the bidirectional barbed suture has resulted in a paradigm shift in how wounds may be closed. Eliminating knot tying, speeding the placement of the sutures, eliminating the need for an assistant’s hand to follow the suture placement, enhancing the equal distribution of tension, and creating the possibility of improved scar cosmesis are compelling validations of this emerging*

*technology, which arguably may be the most important recent advancement in suture technology, with clear benefits to the patient and to the surgeon.”*

**12. ABDOMINOPLASTY WITH PROGRESSIVE TENSION CLOSURE USING A BARBED SUTURE TECHNIQUE.** WARNER JP, GODOWSKY KA. AESTHETIC SURGERY JOURNAL. 2009; 29(3): 221-225.

*“Results: There was a marked reduction in the time necessary to perform the modified progressive tension suture technique using barbed sutures compared to previously published data. The authors' average time was nine minutes to complete plication of the entire abdominal flap. One seroma is reported, which was resolved with one aspiration. No hematomas or skin necrosis complications are reported.”*

*“Conclusions: Using barbed sutures to perform progressive tension suture closure in abdominoplasty is a safe and effective way to considerably reduce operative time and retain all of the benefits of the original progressive tension suture techniques.”*

**13. L-BRACHIOPLASTY: AN ADAPTABLE TECHNIQUE FOR MODERATE TO SEVERE EXCESS SKIN AND FAT OF THE ARMS.** HURWITZ DJ & JERROD K. AESTHETIC SURGERY JOURNAL. JULY 2010. 30(4):620-9.

*“Conclusions: The original L-brachioplasty technique is commonly employed for patients with arm deformity resulting from MWL. With our improved understanding of the aesthetics and the four modifications described herein, the authors have improved their results and lowered their complication rates. We have gone beyond the concept of arm reduction surgery and are now able to offer patients a procedure that sculpts the region more specifically, offering an improved aesthetic result. Specifically, with this procedure, the authors recommend leaving a small amount of extra tissue, rather than compromise shape or hazarding serious complications. With the improvement in shape, scar placement, and reduced complications, this L-brachioplasty technique can take its place as the optimal cosmetic operation for moderate to severe skin and fat redundancy of the upper arm.”*

**14. USE OF ABSORBABLE RUNNING BARBED SUTURE AND PROGRESSIVE TENSION TECHNIQUE IN ABDOMINOPLASTY: A NOVEL APPROACH.** ROSEN, AD. PLASTIC AND RECONSTRUCTIVE SURGERY. MARCH 2010; 125(3): 1024-7.

*“This series of patients clearly shows that the use of absorbable bidirectional barbed sutures for repair of fascial defects in abdominoplasty, including fascial plication, progressive tension, and layered skin closure, is a satisfactory alternative to previously reported options. Furthermore, it eliminates the need for redundant permanent suture material and knots. I believe barbed suture technology is truly the proverbial “better mousetrap” that represents a variation of a familiar theme for all surgeons. I am confident that novel uses for this revolutionary technology will be quickly forthcoming. Here, too, I hope, plastic surgeons will lead the way.”*

**15. A CASE FOR THE SAFETY AND EFFICACY OF LIPOABDOMINOPLASTY: A SINGLE SURGEON RETROSPECTIVE REVIEW OF 173 CONSECUTIVE CASES.** WEILER J, TAGGART P, KHOUBEHI K. AESTHETIC SURGERY JOURNAL. 2010. 30(5) 702 –713.

*“Background: The combination of liposuction and abdominoplasty has been slow to be accepted, primarily due to a perceived higher incidence of complications associated with the procedure. There has*

also been extensive debate about the combined procedure's effects on flap vascularity and viability and the extent to which liposuction may be performed in conjunction with surgical abdominoplasty."

**"Conclusions:** The senior author's (KK) lipoabdominoplasty technique, combined with his current preoperative and postoperative protocols, is believed to be a safe procedure that results in excellent cosmetic results. In contrast to some of the current literature, the data show a reduction of overall complications as compared to historical norms."

**16. INCORPORATING BARBED SUTURES IN ABDOMINOPLASTY.** GUTOWSKI KA, WARNER JP. AESTHETIC SURGERY JOURNAL. 2011; 33(3S): 76S-81S.

**"Conclusions:** Based on a small number of published reports, barbed sutures appear to be safe and effective in both standard and circumferential abdominoplasty procedures. Most reports have involved bidirectional (Quill) barbed sutures rather than unidirectional (V-Loc) barbed sutures. Quill and V-Loc sutures may be used for deep- and superficial-incision closure and as PTS and fascial plication sutures. While some reports suggest that there may be a time savings with the use of these sutures, formal time and cost-effectiveness comparisons are limited. As each surgeon incorporates the use of these sutures into his or her practice, additional uses and technical modifications are expected."

**17. EVALUATING THE USE OF A BARBED SUTURE FOR SKIN CLOSURE DURING AUTOLOGOUS BREAST RECONSTRUCTION.** JANDALI S, NELSON JA, BERGEY M, SEEMA S, SONNAD S, SERLETTI J. JOURNAL OF RECONSTRUCTIVE MICROSURGERY. 2011; 27:277–286.

**"Conclusions:** The barbed suture is a bidirectional self-retaining suture that facilitates rapid closure of large wounds, which could be highly useful in autologous breast reconstruction using tissue from the abdomen. Our results demonstrate that this closure method may shorten unilateral operation time, but may not affect bilateral operation time to the same degree. We conclude that the use of a continuous, deep-dermal, barbed suture in the closure of abdominal and breast incisions in free flap breast reconstruction may expedite and potentially reduce the cost of wound closure but may increase wound complications. Further studies utilizing the faster-absorbing monofilament version of this suture may be beneficial and may have a more advantageous complication profile."

**18. KNOTLESS FLEXOR TENDON REPAIR TECHNIQUE USING A BIDIRECTIONAL BARBED SUTURE: AN EX-VIVO COMPARISON OF THREE METHODS.** MCCLELLAN T, SCHESSLER M, RUCH D, LEVIN L, GOLDNER R. WWW.PRSJOURNAL.COM. 2011. VOL 128, NO. 4.

**"Conclusions:** The authors demonstrate that knotless flexor tendon repair with barbed suture has equivalent strength and reduced repair site cross-sectional area compared with traditional techniques. The smaller tendon profile may decrease gliding resistance, thus reducing the risk factor for postsurgical tendon rupture during rehabilitation."

**19. LIFTING AND WOUND CLOSURE WITH BARBED SUTURES.** MULHOLLAND RS MD, PAUL MD. CLINICS IN PLASTIC SURGERY. 38 (2011) 521–535.

*“This article outlines the updated uses and clinical results of barbed suture lifts, both open and closed, of the soft tissue of the face and neck. Long-term results make this barbed suture lift a predictable alternative for those seeking modest, nonexcisional facial rejuvenation of the midface and brow. For open face and necklifts, including the MACS lift, the barbed suture has emerged as an excellent fixation option. The Quill SRS barbed sutures can also be used in body-contouring procedures to significantly increase the speed of abdominoplasty, brachioplasty, mastopexy, and breast reduction surgery. The use of the Quill suture in sequential tension reduction by suturing Scarpa fascia to the rectus sheath is a quick technique that potentially eliminates the use of drains without increasing the risk of seroma. In addition to significantly increasing the speed of these body-contouring procedures, the Quill SRS suture, by more effective tension unloading, may also improve the long-term quality of these high-tension scars.”*

**20. THE USE OF A BARBED SELF-RETAINING SUTURE SYSTEM IN THE POSITIONING AND MANIPULATION OF THE BREAST MOUND DURING RECONSTRUCTIVE AND AESTHETIC BREAST SURGERY.** PRUCZ R, WHEELER C, EDWARDS J, MATHES D, SAID H. PLASTIC AND RECONSTRUCTIVE SURGERY. UNIVERSITY OF WASHINGTON MEDICAL CENTER. AUG 2011: 90E.

*“The advantages of our system include distributed parenchymal support, non-reliance on the skin envelope, minimal ischemia, the elimination of repetitive interrupted suture fixation, and the ability to make small or large adjustable movements. We believe that barbed suture allows for detailed adjustments in shape and position that cannot be obtained with classic suture techniques.”*

**21. REPAIR OF THE MIDLINE FASCIAL DEFECT IN ABDOMINOPLASTY WITH LONG-ACTING BARBED AND SMOOTH ABSORBABLE SUTURES.** ROSEN, A, HATMAN, T. AESTHETIC SURGERY JOURNAL, 2011, 31:668-673.

*“Conclusions: Based on the data from this series of patients, long-acting absorbable barbed or smooth sutures appear to be equally effective in maintaining rectus diastasis repair. Barbed sutures therefore hold promise as a useful alternative to permanent sutures for the plication of the rectus fascia during abdominoplasty.”*

**22. BIDIRECTIONAL BARBED SUTURE MIGRATION: A UNIQUE COMPLICATION AFTER INTRACUTICULAR CLOSURE.** WORKMAN M, DESCHAMPS-BRALY J, MORGAN A, SAWAN K. AESTHETIC PLASTIC SURGERY (2011) 35:672–673 (LETTER TO THE EDITOR).

*“The cause for suture breakage and migration in the reported case may have been due to the resumption of exercise or to the previous episode of cellulitis. Increased inflammatory cells may have led to more rapid degradation of the suture in an isolated location. Because factors contributing to this complication are not entirely avoidable, we present this case as a cautionary note for other surgeons.”*

**23. AN IN VIVO COMPARISON OF BARBED SUTURE DEVICES AND CONVENTIONAL MONOFILAMENT SUTURES FOR COSMETIC SKIN CLOSURE: BIOMECHANICAL WOUND STRENGTH AND HISTOLOGY.** ZARUBY J, GRINGAS K, TAYLOR J, MAUL D. AESTHETIC SURGERY JOURNAL 2011 31: 232.

*“Conclusions: Knotless, absorbable barbed suture devices are a safe and efficacious alternative for cosmetic skin closures and yield wound strength and tissue reaction scores that are comparable to those from closures performed with absorbable monofilament sutures and secured with knots.”*

**24. EARLY EXPERIENCE WITH BARBED SUTURES FOR ABDOMINAL CLOSURE IN DEEP INFERIOR EPIGASTRIC PERFORATOR FLAP BREAST RECONSTRUCTION.** DE BALCAM C, COLAKOGLU S, MOMOH AO, LIN SJ, TOBIAS AM, LEE BT. NEW ENGLAND SOCIETY OF PLASTIC AND RECONSTRUCTIVE SURGEONS MEETING (PRESENTED 2011), EPLASTY.COM PUBLISHED (2012) 12: 231-236.

*“Conclusion: Barbed sutures are a safe and efficient adjunct to traditional wound closure techniques. In this study, closure of the abdominal incision in DIEP flap breast reconstruction resulted in a lower incidence of overall complications. The use of barbed sutures may be useful in a broad range of plastic surgery procedures, not only because of their convenience but also as a consequence of the favorable outcomes.”*

**25. CORSET TRUNKPLASTY: NOVEL PROCEDURE CONTOURS MASSIVE WEIGHT LOSS PATIENTS’ BODIES SAFELY, EFFECTIVELY.** A MOYA MD. COSMETICSURGERYTIMES.COM. OCTOBER 2012, VOL. 15. NO. 9P. 18-22.

*“The current procedure does not require the use of a postoperative drain, partially due to the lack of undermining, Dr. Moya says. Though the corset trunkplasty initially utilized drains, he has since improved the technique with the use of ultrasonic (Harmonic ultrasonic scalpel and shear, Ethicon Endo-Surgery) technology to minimize surrounding tissue damage and seal lymphatic channels as well as bidirectional barbed sutures (Quill Knotless Tissue-Closure Device, Angiotech) for tighter and motion-free closures, he explains. “The evolution of the technique with these small but significant changes allowed me to move to a drainless procedure. I have experienced no seromas in my last 80 patients,” Dr. Moya says.”*

**26. THE CORSET TRUNKPLASTY COMES OF AGE.** A MOYA MD. WWW.PLASTICSURGERYPRACTICE.COM. NOV. 2012, P 16-18.

*“My current approach to the corset trunkplasty does not require the use of a postoperative drain. I attribute these both to the lack of undermining as well as improvements in my overall technique. I exclusively utilize ultrasonic (Harmonic™) technology for all resections, which helps to minimize surrounding tissue damage and seal lymphatic channels. In addition, bidirectional barbed sutures allow for tighter and motion-free closures. This drain-free technique has been utilized in approximately 60 cases, all without development of a single seroma.”*

**27. BARBED SUTURES IN BODY SURGERY.** MOYA A. AESTHETIC SURGERY JOURNAL. 2012; 33(3S): 57S-71S.

*“Abstract: Wound-closing technology continues to evolve with the advent of barbed sutures, which appear to address some of the limitations of traditional sutures (numerous knots and time-consuming*

insertion, among other things). Advantages of knotless suture devices, specifically in body contouring, have been discussed in the literature over the past decade, with a recent increase over the past several years due to the US Food and Drug Administration (FDA) approval of unidirectional V-Loc (Covidien, Mansfield, Massachusetts) and bidirectional Quill (Angiotech Pharmaceuticals, Inc, Vancouver, British Columbia, Canada) barbed sutures for soft tissue approximation. A thorough review of the existing literature and evaluation of the author's personal experience are presented in this article. As with any new surgical device, a learning curve is present that needs to be overcome to realize the full benefits of utilizing barbed sutures in body surgery while minimizing their complications."

**28.A COMPARISON BETWEEN BARBED AND NON-BARBED ABSORBABLE SUTURE FOR FASCIAL CLOSURE IN A PORCINE MODEL.** ONI G MD, S BROWN PHD, J KENKEL MD. PLASTIC AND RECONSTRUCTIVE SURGERY (WWW.PRSJOURNAL.COM). OCT 2012. P 535-540.

**"Conclusions:** This study demonstrated that barbed sutures for fascial repair have equivalent tensile strength when compared with traditional nonbarbed sutures, with no adverse events such as wound dehiscence or incisional hernia. This preclinical study lends support to the practice of using barbed sutures for indications such as rectus sheath plication."

**29. QUILL BARBED SUTURES IN BODY CONTOURING SURGERY: A 6-YEAR COMPARISON WITH RUNNING ABSORBABLE BRAIDED SUTURES.** HURWITZ DJ, REUBEN B. AESTHETIC SURGERY JOURNAL. 2013; 33: 445-565.

**"Objectives:** The authors evaluate suture-line wound healing for body contouring operations with barbed suture wound closure compared with absorbable running suture closure.

**"Conclusions:** Proper barbed suture selection and 2-layer technique led to a statistically significant lower rate of wound-healing complications as compared with prior experience with traditional running braided absorbable sutures. Other benefits were more rapid speed of closure, adequate security of the wound closure, and increased surgeon satisfaction."

**30. BARBED SUTURES IN AESTHETIC SURGERY.** A. MATARASSO MD (GUEST EDITOR), J. BENITO MD, K. GUTOWSKI MD, D HAMMOND MD, D HURWITZ MD, A MOYA MD, M PAUL MD, R PIZZAMIGLIO MD, B REUBEN MD, A ROSEN MD, G RUFF MD, CA SALZBERG MD, M SHERMAK MD, HP WARNER MD. AESTHETIC SURGERY JOURNAL. VOL 33, SUPPL 3, SEPT 2013.

**"Conclusions:** Thought and process in the emerging technology of barbed sutures has evolved from procedures that were ineffective and prone to complications—including relapse, palpability, and extrusion—to reliable methods to reposition dissected and mobilized soft tissues of the aging brow, face, and neck. The bidirectional barbed Quill Knotless Tissue-Closure Device, with a helical barb design and available in absorbable and nonabsorbable polymers, has allowed this technology to be applied to longer incisions that carry varying soft tissue loads. Controlling tension along the incision line has always been the goal of any wound closure. It is my experience that the Quill device decreases the incidence of wound dehiscence and subsequent unfavorable scarring. The observation that wound closure times are shortened, that fewer sutures are required, and that many of the scars may be better in appearance than scars resulting from standard wound closure techniques has led to widespread adoption of this



technology. Both patients and surgeons are the beneficiaries of the value added by use of bidirectional barbed sutures.”

**31. NEW AND EMERGING USES OF BARBED SUTURE TECHNOLOGY IN PLASTIC SURGERY.** ROSEN AD. AESTHETIC SURGERY JOURNAL. 2013; 33(35): 90S-95S.

*“Conclusions: Barbed suture applications are in their infancy. Technological advancement will help drive new techniques, and eventually, tissue-specific sutures with different barb arrays, barb sizes, barb spacing, and barb shapes will be developed. Barbed sutures for skin, fascia, joint capsule, cartilage, and viscera will all have their own unique configuration corresponding to individual tissue characteristics. Laser cut barbs on 10-0 nylon suture material will allow microsurgical procedures without knot-tying, and antibiotic-impregnated sutures will be available for relevant applications. The evidence base to support both current and new applications will need to catch up to the pace of development. It is in our best interest as plastic surgeons to adapt quickly and guide the evolution of this new technology for future surgeons.”*

**32. AESTHETIC REFINEMENTS IN BODY CONTOURING IN THE MASSIVE WEIGHT LOSS PATIENT: TRUNK.** HURWITZ DJ, M.D.. PLASTIC AND RECONSTRUCTIVE SURGERY. THE AMERICAN SOCIETY OF PLASTIC SURGEONS. 2014: 134;1185-1195. DOI:10.1097/PRS.0000000000000759.

*“Background. Aesthetic refinements in body contouring surgery after massive weight loss are evolving in an effort to improve patient appearance. This is a personal clinical review for the trunk.*

*“Conclusions: These aesthetic refinements are previously published anecdotal evidence that are presented together as a part of the author’s routine clinical experience. They await confirmatory experience, or better yet, rigorous scientific study. Until then, these are practical adaptations routinely used by the author on the trunk that merit the reader’s consideration.”*

**33. CLINICAL APPLICATIONS OF BARBED SUTURE IN AESTHETIC BREAST SURGERY.** MITCHELL RTM, BENGTON BP. CLINICAL PLASTIC SURGERY. 2015(42); 595-604. DOI:10.1016/J.CPS.2015.06.003.

*“In conclusion, there is an emerging new area of plastic surgery that has been termed limited access surgery. Often in primary and revisional breast surgery, the incisions are limited and it often feels like trying to operate through a mail slot! It is in these limited access applications where barbed technology is extremely useful by facilitating suturing internally in limited spaces without the need for tying knots. This limited access application and increased speed and efficiency of closures are the main applications and benefits of using these barbed devices.”*

**34. TRANQUILL SLING SNOREPLASTY FOR SNORING: A SINGLE-ARM PILOT STUDY FOR SAFETY AND EFFECTIVENESS.** MURPHEY AW, NGUYEN SA, FULLER C, WEBER AC, CAMILON MP, GILLESPIEMB. THE LARYNGOSCOPE. THE AMERICAN LARYNGOLOGICAL RHINOLOGICAL AND OTOLOGICAL SOCIETY. 2015;1-6.

*“Conclusion. TranQuill Sling Snoreplasty is a safe therapy with minimal morbidity based on clinical evaluations, adverse events and subject pain and swallowing assessments. It significantly improves snoring symptoms and bed partner-assessed snoring in most adult subjects with benign snoring or mild OSA. Our findings will need to be confirmed by larger studies with a longer-term follow up period.”*

**35. RHYTIDECTOMY UTILIZING BIDIRECTIONAL SELF-RETAINING SUTURES: THE BIDIRECTIONAL LIFT AND THE EXTENDED BIDIRECTIONAL LIFT.** O'CONNELL JB. AESTHETIC SURGERY JOURNAL. 2015 35(6); 633-643. DOI: 10.1093/ASJ/SJU167.

*“Conclusions. The author presents a new technique for a minimal incision rhytidectomy and a traditional rhytidectomy utilizing bidirectional barbed sutures to produce a 2-layer SMAS plication while reducing the risks of bleeding and nerve injury and eliminating the possibility of knot visibility, palpability, or extrusion. In many cases, the standard bidirectional lift can be performed under local anesthesia with or without minimal oral tranquilization.”*

**36. A FOUR-LAYER WOUND CLOSURE TECHNIQUE WITH BARBED SUTURES FOR STABLE REST OF THE INFRAMAMMARY FOLD IN BREAST AUGMENTATION.** MONTEMURRO P, LI AQ, HEDÉN P, AVVEDIMENTO S. AESTHETIC SURGERY JOURNAL. 2016; 1-6. DOI:10.1093/ASJ/SJW011.

*“The authors present a simple method that provides accurate, stable, and long lasting repositioning of the new IMF with a four-layer wound closure technique using barbed sutures. These sutures have recently become more popular across a number of surgical specialties as well as in plastic surgery, since their introduction in 1967 for tendon repair.”*

**37. NO-DRAIN DIEP FLAP DONOR-SITE CLOSURE USING BARBED PROGRESSIVE TENSION SUTURES.** NAGARKAR P, LAKHIANI C, CHENG A, LEE M, TEOTIA S, SAINT-CYR M. PLASTIC AND RECONSTRUCTIVE SURGERY GLOBAL OPEN. 2016;4; 1-8. DOI: 0.1097/GOX.000000000000049.

*“Conclusions. No-drain DIEP flap donor-site closure using B-PTS is a safe and effective alternative to traditional abdominal closure using drains. Overall donor-site complication rates following this technique are significantly lower than with traditional donor-site closure. This technique may help to prevent abdominal wound dehiscence, especially in patients who will undergo adjuvant chemotherapy.”*

**38. PHOTOMETRIC ANALYSIS OF ABSORBABLE BARBED SUTURE FOR PERIAREOLAR CLOSURE IN MASTOPEXY.** ROSEN AD, GUZMAN AM, HARTMAN T. PLASTIC AND AESTHETIC RESEARCH JOURNAL. 2016; 3: 296-301.

*“The tension reducing benefits of the interlocking purse-string technique combined with absorbable barbed suture technology yields predictable areolar size outcome and minimizes suture related complications in mastopexy. As plastic surgeons continue to evolve and explore new suture technologies and techniques, this study will support the safety and efficacy of doing so exclusively with absorbable bared suture.”*