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### Cochrane Systematic Reviews

**New Reviews – December 2014**

**Immunonutrition as an adjuvant therapy for burns**

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34. Use of autologous fat grafting for breast reconstruction: A systematic review with meta-analysis of oncological outcomes.

1.Title: Acute and perioperative care of the burn-injured patient
Citation: Anesthesiology, February 2015, vol./is. 122/2(448-464), 0003-3022;1528-1175 (02 Feb 2015)
Author(s): Bittner E.A., Shank E., Woodson L., Martyn J.A.J.
Language: English
Abstract: Care of burn-injured patients requires knowledge of the pathophysiologic changes affecting virtually all organs from the onset of injury until wounds are healed. Massive airway and/or lung edema can occur rapidly and unpredictably after burn and/or inhalation injury. Hemodynamics in the early phase of severe burn injury is characterized by a reduction in cardiac output and increased systemic and pulmonary vascular resistance. Approximately 2 to 5 days after major burn injury, a hyperdynamic and hypermetabolic state develops. Electrical burns result in morbidity much higher than expected based on burn size alone. Formulae for fluid resuscitation should serve only as guideline; fluids should be titrated to physiologic endpoints. Burn injury is associated basal and procedural pain requiring higher than normal opioid and sedative doses. Operating room concerns for the burn-injured patient include airway abnormalities, impaired lung function, vascular access, deceptively large and rapid blood loss, hypothermia, and altered pharmacology.
Publication type: Journal: Review
Source: EMBASE
Full text: Available Anesthesiology at Anesthesiology

2.Title: Acute pain management in burn patients: Appraisal and thematic analysis of four clinical guidelines
Citation: Burns, December 2014, vol./is. 40/8(1463-1469), 0305-4179;1879-1409 (01 Dec 2014)
Author(s): Gamst-Jensen H., Vedel P.N., Lindberg-Larsen V.O., Egerod I.
Language: English
Abstract: Objective: Burn patients suffer excruciating pain due to their injuries and procedures related to surgery, wound care, and mobilization. Acute Stress Disorder, Post-Traumatic Stress Disorder, chronic pain and depression are highly prevalent among survivors of severe burns. Evidence-based pain management addresses and alleviates these complications. The aim of our study was to compare clinical guidelines for pain management in burn patients in selected European and non-European countries. We included pediatric guidelines due to the high rate of children
in burn units. Method: The study had a comparative retrospective design using combined methodology of instrument appraisal and thematic analysis. Three investigators appraised guidelines from burn units in Denmark (DK), Sweden (SE), New Zealand (NZ), and USA using the AGREE Instrument (Appraisal of Guidelines for Research & Evaluation), version II, and identified core themes in the guidelines. Results: The overall scores expressing quality in six domains of the AGREE instrument were variable at 22% (DK), 44% (SE), 100% (NZ), and 78% (USA). The guidelines from NZ and USA were highly recommended, the Swedish was recommended, whereas the Danish was not recommended. The identified core themes were: continuous pain, procedural pain, postoperative pain, pain assessment, anxiety, and non-pharmacological interventions. Conclusion: The study demonstrated variability in quality, transparency, and core content in clinical guidelines on pain management in burn patients. The most highly recommended guidelines provided clear and accurate recommendations for the nursing and medical staff on pain management in burn patients. We recommend the use of a validated appraisal tool such as the AGREE instrument to provide more consistent and evidence-based care to burn patients in the clinic, to unify guideline construction, and to enable interdepartmental comparison of treatment and outcomes.

**Publication type:** Journal: Article

**Source:** EMBASE

3. **Title:** Advances in small joint arthroplasty of the hand  
**Citation:** Plastic and reconstructive surgery, December 2014, vol./is. 134/6(1260-1268), 1529-4242 (01 Dec 2014)  
**Author(s):** Adkinson J.M., Chung K.C.  
**Language:** English  
**Abstract:** Substantial effort has been directed at the development of small joint prostheses for the hand. Despite advances in prosthetic joint design, outcomes have been relatively unchanged over the past 60 years. Pain relief and range of motion achieved after surgery have yet to mirror the success of large joint arthroplasty. Innovations in biotechnology and stem cell applications for damaged joint surfaces may someday make prostheses obsolete. The purpose of this review is to describe the current status, ongoing advances, and future of small joint arthroplasty of the hand.

**Publication type:** Journal: Review

**Source:** EMBASE

**Full text:** Available [Journal of reconstructive microsurgery](https://www.plasticsurgery.org) at [Plastic and Reconstructive Surgery](https://www.plasticsurgery.org)

4. **Title:** Aesthetic refinements in body contouring in the massive weight loss patient: trunk  
**Citation:** Plastic and reconstructive surgery, December 2014, vol./is. 134/6(1185-1195), 1529-4242 (01 Dec 2014)  
**Author(s):** Hurwitz D.J.  
**Language:** English  
**Abstract:** 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. METHODS: There are 10 essential elements to performing body contouring surgery after massive weight loss. Based on this generally accepted baseline, the author presents 16 outstanding aesthetic refinements. These reliable and safe adaptations to improve outcomes were assembled from a personal case review of the past 12 years of over 500 cases. The refinements are the result of lectures attended, literature read, and innovations tried. Gender enhancement is emphasized. Plastic surgeons improve female shape through artful management of adipose deposits. Surgeons enhance male muscularity through an abdominoplasty and a series of large opposing ellipses for skin tightening across the entire torso. RESULTS: These 16 refinements have been applied to the trunk. Four representative cases with preoperative markings and late postoperative results demonstrate the value of these aesthetic refinements. The accompanying video that demonstrates drawing the boomerang pattern correction of gynecomastia with J-torsoplasty reveals many of these refinements. CONCLUSIONS: These aesthetic refinements are previously published anecdotal evidence that are presented together as 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.

**Publication type:** Journal: Article

**Source:** EMBASE

**Full text:** Available [Journal of reconstructive microsurgery](https://www.plasticsurgery.org) at [Plastic and Reconstructive Surgery](https://www.plasticsurgery.org)

5. **Title:** An expanded delivery model for outpatient burn rehabilitation  
**Citation:** Journal of Burn Care and Research, January 2015, vol./is. 36/1(14-22), 1559-047X;1559-0488 (21 Jan 2015)
Title: Bilateral simultaneous breast reconstruction with transverse musculocutaneous gracilis flaps

Citation: Journal of Plastic, Reconstructive and Aesthetic Surgery, January 2015, vol./is. 68/1(e1-e6), 1748-6815;1878-0539 (01 Jan 2015)

Author(s): Bodin F., Schohn T., Dissaux C., Baratte A., Fiquet C., Bruant-Rodier C.

Language: English

Abstract: Background A transverse musculocutaneous gracilis flap provides good autologous reconstruction for small- and medium-sized breasts. Although the procedure is well adapted for bilateral breast reconstruction, no publication has specifically addressed simultaneous bilateral cases. Methods From 2010 to 2014, the authors performed seven simultaneous bilateral breast reconstructions using transverse musculocutaneous gracilis flaps. The results with respect to operative data, immediate complications, second-stage reconstruction, and patient satisfaction after >1 year of follow-up were studied retrospectively. Results The mean operative time was 7 h and 48 min (range, 6-9 h). Three minor complications occurred: two cases of limited flap necrosis and one case of donor-site wound dehiscence. Surgical revision was not required, and there was no flap failure. A second-stage operation was performed in 71% of the patients to improve the aesthetic results and flap volume. On average, 167 cm³ of fat was injected per breast. After a mean follow-up of 27 months, the satisfaction rate was 86% without significant functional deficits. Conclusions A transverse musculocutaneous gracilis flap is an effective and safe option for simultaneous bilateral reconstruction. The operating time is shorter than that for other autologous procedures with similar complication rates and high patient satisfaction levels.

Publication type: Journal: Article

Source: EMBASE

Full text: Available Ovid at Journal of Burn Care and Research

Full text: Available Ovid at Journal of Burn Care and Research
9. Title: Corrective and reconstructive surgery in patients with postburn heterotopic ossification and bony ankylosis: An evidence-based approach

Citation: Journal of Burn Care and Research, January 2015, vol./is. 36/1(57-69), 1559-047X;1559-0488 (21 Jan 2015)

Author(s): Pontell M.E., Sparber L.S., Chamberlain R.S.

Language: English

Abstract: Articular heterotopic ossification (HO) and subsequent bony ankylosis (BA) are infrequent yet devastating complications of severe burn injuries. These conditions are diagnosed clinically and confirmed by imaging. Patients then begin active physical therapy until cleared for surgery, which remains the standard of care. This study critically reviews the existing literature on the diagnosis, treatment, and surgical outcomes of HO/BA in severely burned patients and provides an evidence-based treatment algorithm. A comprehensive search for all the studies addressing HO and BA after burn injury was conducted using PubMed and Google Scholar from 1957 to 2013. Fifty-one studies on postburn HO/BA have been published, reporting incidences from 0.1 to 35.3%. Most patients suffered from third-degree, thermal burns, with a mean TBSA of 49 +/- 14%. The mean time from burn until diagnosis was 7 +/- 11 months. Seventy-nine percent of the affected joints were elbows and 84% had adjacent and/or overlying burns. Ninety-one percent of joints had solely extra-articular HO. Ninety percent of HO/BA cases were treated with anatomic excision, and all achieved appreciable increases in range of motion with infrequent recurrence. Perioperative radiotherapy was used infrequently. Surgical articular reconstruction is the standard of care for postburn HO/BA severe enough to limit joint movement and/or function. Early detection and initiation of physical therapy are paramount in preventing progression to complete BA. Increased awareness and more rapid means of detecting postburn articular changes may permit earlier discontinuation of passive range of motion exercises, thereby halting the initiation and progression of HO.

Publication type: Journal: Article

Source: EMBASE

Full text: Available Ovid at Journal of Burn Care and Research

Full text: Available Ovid at Journal of Burn Care and Research

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8. Title: Current concepts in treatment of fracture-dislocations of the proximal interphalangeal joint

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Citation: JAMA Facial Plastic Surgery, January 2015, vol./is. 17/1(49-55), 2168-6076;2168-6092 (2015 Jan 1)

Author(s): Wee JH, Park MH, Oh S, Jin HR

Language: English

Abstract: IMPORTANCE: Although autologous rib cartilage is a preferred source of graft material in rhinoplasty, rib cartilage for dorsal augmentation has been continuously criticized for its tendency to warp and for high donor-site morbidities. However, no meta-analysis or systemic review on complications associated with autologous rib cartilage use in rhinoplasty has been conducted.OBJECTIVE: To carry out a systematic review and a meta-analysis of available literature to evaluate complications regarding autologous rib cartilage in rhinoplasty.

DATA SOURCES: The studies reporting complications associated with the autologous rib cartilage use in rhinoplasty were systematically reviewed by searching the MEDLINE, PubMed, and Embase databases for sources published from 1946 through June 2013.

STUDY SELECTION: The selected articles included clinical studies conducted with at least 10 patients and at least 1 postoperative long-term complication or donor-site morbidity in rhinoplasty. Excluded were nonhuman studies; review articles; case reports; abstracts; and reports of nasal reconstruction as indication for surgery, use of homologous rib cartilage, and diced or laminated methods.

DATA EXTRACTION AND SYNTHESIS: Two investigators independently reviewed all studies and extracted the data using a standardized form. A meta-analysis was performed using a random-effects model.

MAIN OUTCOMES AND MEASURES: Number of patients; follow-up duration; and rates of complication, donor-site morbidity, and revision surgery. Also noted were study authors and year of publication.

RESULTS: Ten studies involving a total 491 patients were identified. Mean follow-up across all studies was 33.3 months. In meta-analysis, the combined rates were 3.08% (95% confidence interval [CI], 0%-10.15%) for warping, 0.22% (95% CI, 0%-1.25%) for resorption, 0.56% (95% CI, 0%-2.61%) for infection, 0.39% (95% CI, 0%-1.97%) for displacement, 5.45% (95% CI, 0.68%-13.24%) for hypertrophic chest scarring, 0% (95% CI, 0%-0.32%) for pneumothorax, and 14.07% (95% CI, 6.19%-24.20%) for revision surgery.

CONCLUSIONS AND RELEVANCE: The overall long-term complications and donor-site morbidity rates associated with autologous rib cartilage use in rhinoplasty were low. Warping and hypertrophic chest scarring showed relatively higher rates, warranting a surgeon's attention. Because a limited number of studies and patients were eligible, and consistent definitions of complications were lacking in this meta-analysis, future studies with a larger series of patients and objective outcome measurements are needed to obtain more reliable results.

LEVEL OF EVIDENCE: 4.

Publication type: Journal Article

Source: MEDLINE
BACKGROUND: Proximal interphalangeal joint fracture-dislocations are common injuries that require expedient and attentive treatment for the best outcomes. Management can range from protective splinting and early mobilization to complex surgery. In this review, the current concepts surrounding the management of these injuries are reviewed.

METHODS: A literature review was performed of all recent articles pertaining to proximal interphalangeal joint fracture-dislocation, with specific focus on middle phalangeal base fractures. Where appropriate, older articles or articles on closely related injury types were included for completeness. The methodology and outcomes of each study were analyzed.

RESULTS: When small avulsion fractures are present, good results are routinely obtained with reduction and early mobilization of stable injuries. Strategies for management of the unstable dorsal fracture-dislocation have evolved over time. To provide early stability, a variety of techniques have evolved, including closed, percutaneous, external, and internal fixation methods. Although each of these techniques can be successful in skilled hands, none has been subjected to rigorous, prospective, comparative trials. Volar dislocations fare less well, with significant loss of motion in many studies. Pilon fractures represent the most complicated injuries, and return of normal motion is not expected.

CONCLUSIONS: The best outcomes can be achieved by (1) establishing enough stability to allow early motion, (2) restoring gliding joint motion rather than noncongruent motion, and (3) restoring the articular surface congruity when possible. Although the majority of literature on this topic consists of expert opinion and retrospective case series, the consensus appears to favor less invasive techniques whenever possible.

Publication type: Journal: Review
Source: EMBASE
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery

10. Title: Evidence-based medicine: Wound closure
Citation: Plastic and reconstructive surgery, December 2014, vol./is. 134/6(1391-1404), 1529-4242 (01 Dec 2014)
Author(s): Buchanan P.J., Kung T.A., Cederna P.S.
Language: English
Abstract: LEARNING OBJECTIVES: After reading this article, the participant should be able to: 1. Describe various wound closure techniques available to the modern plastic surgeon, including the indications and contraindications of each. 2. Explain the fundamental concepts of wound healing as it relates to reconstruction. 3. Understand the role of commonly used reconstructive adjuncts such as negative-pressure wound therapy, dermal substitutes, and tissue expansion. 4. Assess the important patient factors that may influence the strategy for surgical wound closure.
SUMMARY: Successful wound closure requires a comprehensive approach that includes consideration of suitable surgical techniques and critical patient factors. A clear understanding of key concepts such as wound healing, flap design, and patient risk assessment is imperative to a favorable outcome. In this Maintenance of Certification/Continuing Medical Education article, the reader is provided a summary of the available surgical options for wound closure and a discussion of the algorithm used to choose the most appropriate reconstructive strategy.
Publication type: Journal: Review
Source: EMBASE
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery

11. Title: Impact of reduced resuscitation fluid on outcomes of children with 10-20% body surface area scalds
Citation: Burns, December 2014, vol./is. 40/8(1581-1586), 0305-4179;1879-1409 (01 Dec 2014)
Author(s): Walker T.L.J., Rodriguez D.U., Coy K., Hollen L.I., Greenwood R., Young A.E.R.
Language: English
Abstract: 'Permissive hypovolaemia' fluid regimes in adult burn care are suggested to improve outcomes. Effects in paediatric burn care are less well understood. In a retrospective audit, outcomes of children from the South West Children's Burn Centre (SWCBC) less than 16 years of age with scalds of 10-20% burn surface area (BSA) managed with a reduced volume fluid resuscitation regime (post-2007) were compared to (a) an historical local protocol (pre-2007) and (b) current regimes in burn services across England and Wales (E&W). Outcomes included length of stay per percent burn surface area (LOS/%BSA), skin graft requirement and re-admission rates. 92 SWCBC patients and 475 patients treated in 15 other E&W burn services were included. Median LOS/%BSA for patients managed with the reduced fluid regime was 0.27 days: significantly less than pre-2007 and other E&W burn services (0.54 days, 0.50
days, p < 0.001). Skin grafting to achieve healing reduced post-2007 compared to pre-2007 and remains comparable with other E&W services. Re-admission rates were comparable between all groups. A reduced fluid regime has significantly shortened LOS/%BSA without compromising burn depth as measured by skin grafting to achieve healing. A prospective trial comparing permissive hypovolaemia to current regimes for moderate paediatric scald injuries would help clarify.

Publication type: Journal: Article
Source: EMBASE

12. Title: Important aspects of head and neck reconstruction
Citation: Plastic and reconstructive surgery, December 2014, vol./is. 134/6(968e-980e), 1529-4242 (01 Dec 2014)
Author(s): Hanasono M.M., Matros E., Disa J.J.
Language: English
Abstract: LEARNING OBJECTIVES: After studying this article, the participant should be able to: 1. Select appropriate local and pedicled flaps for oral cavity reconstruction based on the location and extent of the defect and donor-site characteristics. 2. Understand the functions of the tongue and select the appropriate reconstructive technique based on the size and location of the glossectomy defect. 3. Understand the advantages and disadvantages of treating various maxillectomy defects with prosthetics, soft-tissue pedicled and free flaps, and osteocutaneous free flaps. 4. Conceptualize a reconstructive algorithm for the hypopharynx based on the extent of circumference resected and need to replace external neck skin. 5. Understand advantages of the fibula over other osteocutaneous flaps for mandible reconstruction.SUMMARY: Head and neck defects are among the most challenging for the reconstructive surgeon because of the intimate relationship between form and function in this anatomical area. Microsurgical techniques have improved outcomes for these procedures by expanding the available reconstructive methods beyond the limitations of traditional pedicled flaps, although the pectoralis flap remains a useful workhorse option. This article reviews current surgical techniques for reconstruction of the oral cavity, maxilla, hypopharynx, and mandible in the cancer patient.
Publication type: Journal: Review
Source: EMBASE
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery

13. Title: Improving results of flexor tendon repair and rehabilitation
Citation: Plastic and reconstructive surgery, December 2014, vol./is. 134/6(913e-925e), 1529-4242 (01 Dec 2014)
Author(s): Wong J.K., Peck F.
Language: English
Abstract: BACKGROUND: The global time and effort attributed to improving outcomes in the management of flexor tendon injury are large, but the degree of advancement made over the past 50 years is relatively small. This review examines the current perceived wisdom in this field and aims to explore the limitations to the authors' understanding of the tendon healing process, examining how this may be a factor that has contributed to the authors' modest progress in the field.METHODS: The authors critically evaluate the sum of laboratory and clinical literature on the topic of zone II flexor tendon management that has guided their practice and provide evidence to support their methods.RESULTS: The review highlights some of the key developments over the years and assesses their influence on changing current practice. It also highlights recent innovations, which have the potential to influence flexor tendon outcomes by altering the surgical approach, techniques, and rehabilitation regimens. Future innovations in the field will also be discussed to examine their potential in expanding the development in the management of flexor tendon injury.CONCLUSIONS: A better understanding of flexor tendon biology will allow progress in developing new therapies for flexor tendon injuries; however, there are as yet few real breakthroughs that will dramatically change current practice.
Publication type: Journal: Review
Source: EMBASE
Full text: Available Journal of reconstructive microsurgery at Plastic and Reconstructive Surgery

14. Title: Is palmar surface area a reliable tool to estimate burn surface areas in obese patients?
Citation: Journal of Burn Care and Research, January 2015, vol./is. 36/1(87-91), 1559-047X;1559-0488 (21 Jan 2015)
Author(s): Butz D.R., Collier Z., O'Connor A., Magdziak M., Gottlieb L.J.
Language: English
Abstract: Estimating TBSA burned is critical to the initial management and fluid resuscitation of patients who have
sustained burn injuries. TBSA of scattered burn injuries are frequently estimated using the patient’s percentage palmar surface area (%PSA), which is taught as being 1% of the TBSA. This study investigates the relationship of %PSA to TBSA as the body mass index (BMI) increases. Age, sex, race, weight, height, and PSA was collected from obese and nonobese volunteers. TBSA was calculated using the Mosteller, DuBois-DuBois, Livingston and Scott, and Yu formulas. The %PSA relative to TBSA was calculated in obese and nonobese volunteers. Data from 100 subjects were collected. Fifty subjects had a BMI >30 and 50 had a BMI <30. The average age was 41 years (22-77 years old). There were 68 women and 32 men. The %PSA ranged from 0.49% of TBSA with a BMI of 58.7 to 1.15% of TBSA with a BMI of 22.6. This correlation of %PSA to BMI was statistically significant with all of the formulas. We should not assume that the %PSA is always 1% of TBSA, especially in obese patients.

**Publication type:** Journal: Article

**Source:** Available Ovid at Journal of Burn Care and Research

**Full text:** Available Ovid at Journal of Burn Care and Research

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15. **Title:** Microbiology and antibiotic prophylaxis in rhinoplasty: a review of 363 consecutive cases.

**Citation:** JAMA Facial Plastic Surgery, January 2015, vol./is. 17/1(23-7), 2168-6076;2168-6092 (2015 Jan 1)

**Author(s):** Yoo DB, Peng GL, Azizzadeh B, Nassif PS

**Language:** English

**Abstract:** IMPORTANCE: A practical technique for reducing infectious complications from rhinoplasty would represent an important surgical advance.OBJECTIVES: To describe the microbial flora of patients undergoing septrhinoplasty and to evaluate the role of preoperative and postoperative antibiotic prophylaxis.DESIGN, SETTING, AND PARTICIPANTS: We performed a retrospective medical record review of 363 consecutive adult patients who underwent preoperative nasal swab testing and rhinoplasty or septorhinoplasty in a single private practice: 279 women (76.9%) and 84 men (23.1%). The average patient age was 35.9 years (age range, 17-70 years).MAIN OUTCOMES AND MEASURES: Identification of endogenous nasal flora and pathogenic bacteria treated with culture-directed antibiotics; evaluation of comorbidities, perioperative infections, and antibiotic treatments.RESULTS: A total of 174 patients (47.9%) underwent primary rhinoplasty, and 189 (52%) underwent revision rhinoplasty. On preoperative nasal culture, 78.2% of patients had normal flora; 10.7% had Staphylococcus aureus; and 0.28% had methicillin-resistant S aureus (MRSA). In 7.4% of patients, fecal coliforms including Escherichia coli, Enterobacter species, and Citrobacter species were found. Age, sex, smoking, the use of oral contraceptives, or the presence of seasonal allergies did not significantly change the nasal flora or the postoperative infection rate. Patients with adult acne were found to have an increased incidence of colonization with fecal coliforms (43.8%; P<.001). Patients with diabetes were found to have an increased incidence of colonization with S aureus (66.7%; P=.002). The overall infection rate was 3.0% (11 of 363 patients), with 4.0% (7 of 174 patients) seen in primary septorhinoplasties and 2.1% (4 of 189 patients) seen in revision cases. Coliforms accounted for 5 cases (45.5%) of postoperative infections, while S aureus was responsible for 4 cases (36.4%), including 1 case of MRSA.CONCLUSIONS AND RELEVANCE: The results of this study suggest that risk factors alone may not reliably predict the subset of patients in whom antibiotic prophylaxis is indicated. Knowledge of the endogenous nasal flora and the microbiology of common pathogens in patients undergoing septrhinoplasty will help to further reduce the incidence of infectious complications.LEVEL OF EVIDENCE: 3.

**Publication type:** Journal Article

**Source:** MEDLINE

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16. **Title:** Muscle versus Fasciocutaneous Free Flaps in Heel Reconstruction: Systematic Review and Meta-Analysis.

**Citation:** Journal of Reconstructive Microsurgery, January 2015, vol./is. 31/1(59-66), 1098-8947 (2015 Jan)

**Author(s):** Fox CM, Beem HM, Wiper J, Rozen WM, Wagels M, Leong JC

**Language:** English

**Abstract:** Background Management of soft tissue injuries of the heel is challenging and the composition of free tissue transfer that provides optimal aesthetic and functional outcomes in heel reconstruction is not clear. While fasciocutaneous flaps may result in shear planes that cause instability with mobilization, insensate muscle flaps may not be able to withstand the pressures of weight bearing and thus ulcerate. Methods A systematic literature search was performed using Medline and PubMed databases. Primary outcome measures were time to mobilize, ulceration, revision or debulking surgery, and the requirement for specialized footwear. Analysis of pooled outcomes was undertaken using fixed-effects meta-analysis, calculating the incidence rate ratio for included articles. Results Overall 576 articles were identified; out of which 11 articles met the final inclusion criteria, detailing 168 free tissue transfers in 163 patients. The study size ranged from 4 to 72 cases. There was a trend toward higher rates of ulceration (17 vs. 26%), requirement for revision (23 vs. 31%), and the requirement for specialized footwear (35 vs. 56%) in muscle
flaps, but these differences were not statistically significant. Conclusion The current review provided a summary of reported outcomes of free heel reconstruction in the literature till date. With the current evidence largely limited to small cohort studies (level IV evidence), there were no significant differences found between reconstructive options. These findings serve as a call to action for more reconstructive surgeons to collaborate on multi-institutional prospective studies with robust outcomes assessment. As such, an ideal flap for reconstruction of the weight-bearing heel has not yet been made clear. Copyright Thieme Medical Publishers 333 Seventh Avenue, New York, NY 10001, USA.

**17. Title:** Nutritional care of the obese adult burn patient: A U.K. survey and literature review

**Citation:** Journal of Burn Care and Research, 2014, vol./is. 35/3(199-211), 1559-047X;1559-0488 (2014)

**Author(s):** Goutos I.

**Language:** English

**Abstract:** Obesity is an emerging healthcare problem and affects an increasing number of burn patients worldwide. An email survey questionnaire was constructed and distributed among the 16 U.K. burn services providing adult inpatient facilities to investigate nutritional practices in obese thermally injured patients. Responses received from all dieticians invited to participate in the study were analyzed, and a relevant literature review of key aspects of nutritional care is presented. The majority of services believe that obese patients warrant a different nutritional approach with specific emphasis to avoid overfeeding. The most common algebraic formulae used to calculate calorific requirements include the Schofield, Henry, and modified Penn State equations. Indirect calorimetry despite being considered the "criterion standard" tool to calculate energy requirements is not currently used by any of the U.K. burn services. Gastric/enteral nutrition is initiated within 24 hours of admission in the services surveyed, and a variety of different practices were noted in terms of fasting protocols before procedures requiring general anesthesia/sedation. Hypocaloric regimens for obese patients are not supported by the majority of U.K. facilities, given the limited evidence base supporting their use. The results of this survey outline the wide diversity of dietetic practices adopted in the care of obese burn patients and reveal the need for further study to determine optimal nutritional strategies. Copyright © 2014 by the American Burn Association.

**Publication type:** Journal: Review

**Source:** EMBASE

**Full text:** Available Ovid at Journal of Burn Care and Research

**18. Title:** Obese patients in a burn care unit: A major challenge

**Citation:** Burns, December 2014, vol./is. 40/8(1738-1742), 0305-4179;1879-1409 (01 Dec 2014)

**Author(s):** Liodaki E., Senyaman O., Stollwerck P.L., Mollmeier D., Mauss K.L., Mailander P., Stang F.

**Language:** English

**Abstract:** Objective: Obesity is an important predictor of mortality and morbidity during a hospital stay. There is very little data concerning the impact of the BMI on clinical outcomes in obese burn patients. The purpose of this study is to document the general epidemiological aspects of thermal injuries in an obese population and draw attention to topics relating to the management, rehabilitation and prognosis of burns in this emerging subpopulation of patients. Methods: All patients >16 years of age admitted to the burn unit between January 2008 and December 2012 and fulfilling the burn center referral criteria were enrolled in the study. SPSS version 20 (SPSS GmbH Software, Illinois, USA) was employed for data analysis. Results: Eleven extreme obese patients (men:women, 6:5) had a mean BMI of 38 kg/m<sup>2</sup>. Their incidence in our study was 5.5%. The mean length of stay was 41.5 days, almost twice that of the non-obese. The presence of co-morbidities such as diabetes, hypertension, cardiac disease, or pulmonary disease, the problematic wound healing and the burn wound infection were significantly higher in the obese patients than in the non-obese. The mortality of obese burned patients was 36.4%. Conclusions: These facts indicate admission of these patients to a burn care unit for the best possible treatment although they might not always fulfill criteria for admission to burn intensive care unit. Burn centers must be also prepared in terms of special nursing equipment for obese patients.

**Publication type:** Journal: Article

**Source:** EMBASE

**19. Title:** Posterior perineal reconstructions with "supra-fascial" lotus petal flaps

**Citation:** Journal of Plastic, Reconstructive and Aesthetic Surgery, January 2015, vol./is. 68/1(e7-e12), 1748-6815;1878-0539 (01 Jan 2015)
Propeller flap reconstruction of abdominal defects: Review of the literature and case report.

Title: Propeller flap reconstruction of abdominal defects: Review of the literature and case report.

Citation: Microsurgery, January 2015, vol./is. 35/1(72-8), 0738-1085;1098-2752 (2015 Jan)

Author(s): Scaglioni MF, Giuseppe AD, Chang EI

Language: English

Abstract: The abdominal wall is perfused anteriorly by the superior and deep epigastric vessels with a smaller contribution from the superficial system. The lateral abdominal wall is perfused predominantly from perforators arising from the intercostal vessels. Reconstruction of soft tissue defects involving the abdomen presents a difficult challenge for reconstructive surgeons. Pedicle perforator propeller flaps can be used to reconstruct defects of the abdomen, and here we present a thorough review of the literature as well as a case illustrating the perforasome propeller flap concept. A patient underwent resection for dermatofibrosarcoma protuberans resulting in a large defect of the epigastric soft tissue. A propeller flap was designed based on a perforator arising from the superior deep epigastric vessels and was rotated 90degree into the defect allowing primary closure of the donor site. The patient healed uneventfully and was without recurrent disease 37 months following reconstruction. Perforator flaps for the abdomen are indicated in cases of large defects involving the abdominal wall and the superior epigastric vessels.
22. Title: Pruritus in pediatric burn survivors: Defining the clinical course
Citation: Journal of Burn Care and Research, January 2015, vol./is. 36/1(151-158), 1559-047X;1559-0488 (21 Jan 2015)
Author(s): Schneider J.C., Nadler D.L., Herndon D.N., Kowalske K., Matthews K., Wiechman S.A., Carrougher G.J., Gibran N.S., Meyer W.J., Sheridan R.L., Ryan C.M.
Language: English
Abstract: Pruritus is a frequent and severe symptom and a significant cause of distress for adult burn patients. Its effects in children are largely unstudied. The aim of this study is to characterize postburn itch in the pediatric population. This is a retrospective review from 2006 to 2013 for pediatric burn survivors who were enrolled in a longitudinal multicenter outcomes study. Demographic data, injury characteristics, associated symptoms (skin-related problems, pain, and sleep), and incidence and intensity (Numerical Rating Scale) of itch were examined. Measures were completed at hospital discharge and at 6, 12, and 24 months after injury. Spearman's correlations were used to examine the correlation between itch intensity and associated symptoms. Multivariate regression analyses examined the impact of associated symptoms on itch intensity. There were 430 pediatric burn survivors with a mean age of 7.8 years and a mean TBSA of 40.8%. Pruritus is present in most children (93%) and is of moderate intensity (5.7 +/- 3.1) at discharge. The frequency and intensity of pruritus decreases over time; a majority of children continue to report symptoms at 2 years (63%). Itch was significantly correlated with associated symptoms. Regression analyses showed a correlation between itch intensity and pain at each time point. There was no association between itch intensity and burn etiology, age, gender, or burn size. Pruritus is a frequent complication that lasts for at least 2 years after injury in a majority of pediatric burn survivors. This information will enable better tracking of outcomes and will serve as a baseline for assessing interventions.
Publication type: Journal: Article
Source: EMBASE
Full text: Available Ovid at Journal of Burn Care and Research

23. Title: Pulmonary embolism in burns, is there an evidence based prophylactic recommendation? Case report and review of literature.
Citation: Burns, March 2015, vol./is. 41/2(e4-7), 0305-4179;1879-1409 (2015 Mar)
Author(s): Sebastian R, Ghanem O, DiRoma F, Milner SM, Price LA
Language: English
Abstract: Burn patients exhibit an acquired hypercoagulable state with increased risk of venous thromboembolism. Currently, no randomized control study assessing the efficacy of chemical venous thromboembolism (VTE) prophylaxis in burn patients has been performed. We present a case of a morbidly (body mass index>54kg/m(2)) obese patient with 18% total body surface area (TBSA) burn who developed a VTE and a non-fatal submassive pulmonary embolus (PE). We will be reviewing the current consensus of venous thrombosis prophylaxis in burn patients and briefly discuss the treatment of PE in this population. Copyright &©2014. Published by Elsevier Ltd.
Publication type: Journal Article
Source: MEDLINE

24. Title: Reconstruction of the traumatized thumb
Citation: Plastic and reconstructive surgery, December 2014, vol./is. 134/6(1235-1245), 1529-4242 (01 Dec 2014)
Author(s): Pet M.A., Ko J.H., Vedder N.B.
Language: English
Abstract: BACKGROUND: The goals of thumb reconstruction include the restoration of thumb length, strength, position, stability, mobility, sensibility, and aesthetics. It is a rare event when all of these objectives can be achieved, and prioritization should be based on the goals and functional demands of the patient.METHODS: In this article, the authors review the most common reconstructive strategies for all types of traumatic thumb defects.RESULTS: Replantation is approached first as the primary option for most amputations. Nonreplantable injuries are organized using a simple classification adapted from Lister, dividing thumb amputations into four functional categories: soft-tissue deficit with acceptable length, subtotal amputation with borderline length, total amputation with preservation.
of the carpometacarpal joint, and total amputation with destruction of the carpometacarpal joint. Within each category, relevant microsurgical and nonmicrosurgical reconstructive techniques are discussed, with a focus on appropriate technique selection for a given patient. Evidence and outcomes data are reviewed where available, and case examples from our own experience are provided. CONCLUSIONS: Given that available options now range from simple gauze dressings to complex microsurgical reconstruction, preservation of reconstructive flexibility is essential and should be facilitated by judicious preservation of intact structures. The divergence of available reconstructive pathways underscores the importance of knowing one’s patients, understanding their motivation, and assessing their goals. Only in properly matching the right reconstruction with the right patient will a mutually satisfactory result be achieved.

**Publication type:** Journal: Review

**Source:** EMBASE

**Full text:** Available *Journal of reconstructive microsurgery* at Plastic and Reconstructive Surgery

**25. Title:** Reconstruction of volar skin and soft tissue defects of the digits including the pulp: Experience with the free SUPBRA flap

**Citation:** Journal of Plastic, Reconstructive and Aesthetic Surgery, January 2015, vol./is. 68/1(26-34), 1748-6815;1878-0539 (01 Jan 2015)

**Author(s):** Iwuagwu F.C., Orkar S.K., Siddiqui A.

**Language:** English

**Abstract:** Background The ideal flap for volar defects on the digits should provide glabrous skin, maintain length, be sensate and supple enough to allow unimpeded motion of the joints. When local flap options are either inadequate or unavailable, this constitutes a challenge that usually requires free tissue transfer. We describe our experience of the use of the free transfer of glabrous skin based on the superficial palmar branch of the radial artery (SUPBRA) for digital (volar) reconstruction. Methods Between May 2005 and June 2011, we used this flap to reconstruct digital defects in 13 patients with mean age of 40.1 years (range 18-68 years) and a follow up range from 0.7 to 3.5 years (mean 1.5 years). The dimension of the flaps ranged from 2 x 5cm to 2 x 10 cm. The indications for surgery included traumatic loss of tissue/amputation, severe pulp space infection, dog bite injury, crush injury/ ischemic loss and salvage of failed local flap. The donor site was closed directly in all cases. Results There were no flap failures. All wounds healed with good functional outcomes with ideal tissue match, minimal donor site morbidity and return of protective sensation despite no neurorrhaphy performed except in one patient. Conclusion The free SUPBRA flap has many advantages, approaching ideal replacement for the volar tissues of the fingers, excellent tissue match, minimal donor site morbidity with an excellent camouflaged scar in the mid palmar crease, one operation field, non sacrifice of a major vessel, can be made ‘sensory’, neurotises well and offers a single site for rehabilitation. We believe that the free SUPBRA flap is a very reliable and useful option in the armoury of the reconstructive hand surgeon.

**Publication type:** Journal: Article

**Source:** EMBASE

**Full text:** Available *JOURNAL OF PLASTIC, RECONSTRUCTIVE & AESTHETIC SURGERY (formerly BRITISH JOURNAL OF PLASTIC SURGERY)* at Journal of Plastic, Reconstructive and Aesthetic Surgery

**Full text:** Available *JOURNAL OF PLASTIC, RECONSTRUCTIVE & AESTHETIC SURGERY (formerly BRITISH JOURNAL OF PLASTIC SURGERY)* at Salisbury District Hospital Healthcare Library

**26. Title:** Recovery trajectories after burn injury in young adults: Does burn size matter?

**Citation:** Journal of Burn Care and Research, January 2015, vol./is. 36/1(118-129), 1559-047X;1559-0488 (21 Jan 2015)

**Author(s):** Ryan C.M., Lee A., Kazis L.E., Schneider J.C., Shapiro G.D., Sheridan R.L., Meyer W.J., Palmieri T., Pidcock F.S., Reilly D., Tompkins R.G.

**Language:** English

**Abstract:** The impact of burn size on mortality is well known, but the association of burn size with the trajectories of long-term functional outcomes remains poorly studied. This prospective multi-center study included burned adults ages 19 to 30 years who completed the Young Adult Burn Outcome Questionnaire at initial baseline contact, 2 weeks, and at 6 and 12 months after initial questionnaire administration. Non-burned adults of comparable ages also completed the questionnaire as a reference group. The association between functional recovery and TBSA burned was analyzed longitudinally using generalized linear models with the generalized estimation equation technique. Functional status was characterized in 15 domains: physical function, fine motor function, pain, itch, social function limited by physical function, perceived appearance, social function limited by appearance, sexual function, emotion, family function, family concern, satisfaction with symptom relief, satisfaction with role, work reintegration, and
religion. Scores were standardized to a mean of 50 and a SD of 10 based on non-burned controls. There were 153 burned and 112 non-burned subjects with a total of 620 questionnaires. TBSA burned was 11 +/- 14% (mean +/- SD); 31% had face involvement and 57% had hand involvement. The lag time from burn injury to questionnaire administration was on average 7 +/- 7.7 months, with a maximum of 36 months. Lower recovery levels were associated with increasing burn size for physical function, pain, itch, work reintegration, emotion, satisfaction with symptom relief, satisfaction with role, family function, and family concern (P value ranged from .04-.0001). No significant differences in recovery levels were found with increasing burn size for fine motor function, social function limited by physical function, sexual function, and religion; these areas tracked toward the age-matched non-burned group regardless of burn size. Perceived appearance and social function limited by appearance remained below the non-burn levels throughout the 3-year period regardless of burn size. Three-year recovery trajectories of survivors with larger burn size showed improvements in most areas, but these improvements lagged behind those with smaller burns. Poor perceived appearance was persistent and prevalent regardless of burn size and was found to limit social function in these young adult burn survivors. Expectations for multidimensional recovery from burns in young adults can be benchmarked based on burn size with important implications for patient monitoring and intervening in clinical care.

**Publication type:** Journal: Article  
**Source:** EMBASE  
**Full text:** Available Ovid at Journal of Burn Care and Research

27. **Title:** Safety and efficacy of excision and direct closure in acute burns surgery: Outcome analysis in a prospective series of 100 patients and a survey of UK burns surgeons' attitudes  
**Citation:** Burns, December 2014, vol./is. 40/8(1635-1641), 0305-4179;1879-1409 (01 Dec 2014)  
**Author(s):** Bain C.J., Wang T., McArthur G., Williams G., Atkins J., Jones I.  
**Language:** English  
**Abstract:** Many burns surgeons avoid excision and direct closure of acute burns owing to concerns over wound dehiscence, scarring and infection. There is no evidence in the literature to support this practice. We present outcomes of a prospective series of 100 patients who underwent excision and direct closure of 138 burns over a 2-year period, along with results from a survey sent to 33 senior burns surgeons to gauge attitudes towards direct closure in burns surgery. 47% of survey respondents never perform direct closure. Dehiscence was cited as the most common concern, followed by hypertrophic scarring (HTS). In our cohort, the superficial dehiscence rate was 12% and the HTS rate was 16%, with no scarring contractures. Patients with healing time greater than 14 days were more likely to develop HTS (p = 0.008), as were those with wound dehiscence (p = 0.014). Patients undergoing part-grafting in addition to direct closure took significantly longer to heal than those undergoing direct closure alone (p = 0.0002), with the donor site or graft delaying healing in the majority. Excision and direct closure of acute burn wounds avoids donor site morbidity and has an acceptable complication rate. It is a safe and effective treatment for full thickness burns in selected cases.  
**Publication type:** Journal: Article  
**Source:** EMBASE

28. **Title:** Scalp reconstruction: an algorithmic approach and systematic review.  
**Citation:** JAMA Facial Plastic Surgery, January 2015, vol./is. 17/1(56-66), 2168-6076;2168-6092 (2015 Jan 1)  
**Author(s):** Desai SC, Sand JP, Sharon JD, Branham G, Nussenbaum B  
**Language:** English  
**Abstract:** IMPORTANCE: Reconstruction of the scalp after acquired defects remains a common challenge for the reconstructive surgeon, especially in a patient with a history of radiation to the area. OBJECTIVE: To review the current literature and describe a novel algorithm to help guide the reconstructive surgeon in determining the optimal reconstruction from a cosmetic and functional standpoint. Pertinent surgical anatomy, considerations for patient and technique selection, reconstructive goals, as well as the reconstructive ladder, are also discussed. EVIDENCE REVIEW: A PubMed and Medline search was performed of the entire English literature with respect to scalp reconstruction. Priority of review was given to those studies with higher-quality levels of evidence. FINDINGS: Size, location, radiation history, and potential for hairline distortion are important factors in determining the ideal reconstruction. The tighter and looser areas of the scalp play a major role in the potential for primary or local flap closure. Patients with medium to large defects and a history of radiation will likely benefit from free tissue transfer. CONCLUSIONS AND RELEVANCE: Ideal reconstruction of scalp defects relies on a comprehensive understanding of scalp anatomy, a full consideration of the armamentarium of surgical techniques, and a detailed appraisal of patient factors and expectations. The simplest reconstruction should be used whenever possible to...
provide the most functional and aesthetic scalp reconstruction, with the least amount of complexity.LEVEL OF EVIDENCE: NA.

**Publication type:** Journal Article

**Source:** MEDLINE

**29.Title:** Smoking and plastic surgery, part II. Clinical implications: A systematic review with meta-analysis.

**Citation:** Annales de Chirurgie Plastique et Esthetique, February 2015, vol./is. 60/1(e15-49), 0294-1260;1768-319X (2015 Feb)

**Author(s):** Pluvy I, Panouilleres M, Garrido I, Pauchot J, Saboye J, Chavoin JP, Tropet Y, Grolleau JL, Chaput B

**Language:** English

**Abstract:** OBJECTIVES: Tobacco addiction is a risk factor for complication in plastic surgery. The authors have assembled concrete arguments detailing the risks of perioperative and postoperative complication that are incurred by a patient with continued tobacco intoxication who wishes to undergo a surgical intervention.

RESEARCH STRATEGY: Through application of the PRISMA criteria, we have carried out a systematic review of the literature, in which we explored five databases while using predefined keywords. We selected randomized, controlled observational studies on the perioperative and postoperative complications related to tobacco use in actively smoking, abstinence and non-smoking patients.

DATA COLLECTION AND ANALYSIS: The levels of evidence for each article were evaluated. Risk of bias was assessed using the Newcastle-Ottawa Scale. Incidence parameters including the Odds Ratio and relative risk were calculated for each complication of which the number of occurrences had been indicated. Meta-analysis of the results was carried out.

RESULTS: We included 60 observational studies. In the cosmetic surgery group, we calculated a combined Odds Ratio of 2.3 [1.51-3.54] P<0.001 for surgical site infections and 2.5 [1.49-4.08] P<0.001 for delayed wound healing. In the bariatric surgery sequelae group, we found a combined Odds Ratio of 3.3 [1.90-5.64] P<0.001 with regard to delayed wound healing and 3.1 [1.39-7.13] P=0.006 for cutaneous necrosis. No proof was provided as to the possible influence of tobacco on the success rate of free flap microsurgery, but it is difficult to extrapolate results on the latter to digital reimplantation.

CONCLUSIONS: The review underlines the fact that patients with smoking habits run a significantly heightened risk of cutaneous necrosis, particularly in the event of major detachment (cervico-facial lift, skin-sparing mastectomy, abdominoplasty), of additionally delayed wound healing and of addition surgical site infections. Rigorous preoperative evaluation of smokers could help to diminish these risks.

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**Publication type:** Journal Article

**Source:** MEDLINE

**30.Title:** Suspected adrenal insufficiency in critically ill burned patients: etomidate-induced or critical illness-related corticosteroid insufficiency?-A review of the literature.

**Citation:** Journal of Burn Care & Research, March 2015, vol./is. 36/2(272-8), 1559-047X;1559-0488 (2015 Mar-Apr)

**Author(s):** Mosier MJ, Lasinski AM, Gamelli RL

**Language:** English

**Abstract:** Adrenal insufficiency (AI), whether etomidate-induced or secondary to critical illness-related corticosteroid insufficiency (CIRCI), is a common and under appreciated problem in the intensive care unit intensive care unit (ICU). However, AI is often difficult to identify and diagnose in the critically ill. The pathophysiology and ideal management of etomidate-induced AI and CIRCI, especially in burn patients, is unknown. Many studies, however, have examined the prevalence of and risk factors for developing AI in critically ill populations as well as the effect of AI on morbidity and mortality. Observing a seemingly increased number of patients with suspected AI in our burn ICU, we sought to evaluate and summarize the current literature relating to adrenal insufficiency in the critically ill. We performed an electronic literature search on the PubMed and Ovid Medline databases using the key words "etomidate," "adrenal insufficiency," "CIRCI," and "burn injury." Relevant studies from the current burn and ICU era were selected to be included in this review of the literature. Among the critically ill, burn patients are at increased risk for developing adrenal insufficiency and the risk is greatest for elderly patients with large burns and inhalation injury. Both CIRCI and etomidate-induced AI are associated with high morbidity and mortality, therefore avoiding preventable causes of AI, such as choosing alternatives to etomidate for rapid sequence intubation (RSI) in the severely burn injured patient should be encouraged. Further research is indicated to investigate the biological relationship between AI and associated morbidity and mortality, whether etomidate-induced or secondary to critical illness; as well as how best to identify and diagnose patients with suspected adrenal insufficiency in the burn intensive care unit.

**Publication type:** Journal Article

**Source:** MEDLINE
31. Title: The effect of burn rehabilitation massage therapy on hypertrophic scar after burn: A randomized controlled trial

Citation: Burns, December 2014, vol./is. 40/8(1513-1520), 0305-4179;1879-1409 (01 Dec 2014)


Language: English

Abstract: Objective: To evaluate the effect of burn rehabilitation massage therapy on hypertrophic scar after burn.

Method: One hundred and forty-six burn patients with hypertrophic scar(s) were randomly divided into an experimental group and a control group. All patients received standard rehabilitation therapy for hypertrophic scars and 76 patients (massage group) additionally received burn scar rehabilitation massage therapy. Both before and after the treatment, we determined the scores of visual analog scale (VAS) and itching scale and assessed the scar characteristics of thickness, melanin, erythema, transepidermal water loss (TEWL), sebum, and elasticity by using ultrasonography, Mexameter, Tewameter, Sebumeter, and Cutometer, respectively.

Results: The scores of both VAS and itching scale decreased significantly in both groups, indicating a significant intragroup difference. With regard to the scar characteristics, the massage group showed a significant decrease after treatment in scar thickness, melanin, erythema, TEWL and a significant intergroup difference. In terms of scar elasticity, a significant intergroup difference was noted in immediate distension and gross skin elasticity, while the massage group significant improvement in skin distensibility, immediate distension, immediate retraction, and delayed distension. Conclusion: Our results suggest that burn rehabilitation massage therapy is effective in improving pain, pruritus, and scar characteristics in hypertrophic scars after burn.

Publication type: Journal: Article

Source: EMBASE

32. Title: The hemi-hamate autograft arthroplasty in proximal interphalangeal joint reconstruction: a systematic review.

Citation: Journal of Hand Surgery: European Volume, January 2015, vol./is. 40/1(24-32), 0266-7681;2043-6289 (2015 Jan)

Author(s): Frueh FS, Calcagni M, Lindenblatt N

Language: English

Abstract: Palmar lip injuries of the proximal interphalangeal joint with dorsal fracture-dislocation are difficult to treat and often require major reconstruction. A systematic review was performed and yielded 177 articles. Thirteen articles on hemi-hamate autograft were included in full-text analysis. Results of 71 cases were summarized. Mean follow-up was 36 months and mean proximal interphalangeal joint range of motion was 77degree. Overall complication rate was around 35%. Up to 50% of the patients showed radiographic signs of osteoarthritis. However, few of those patients complained about pain or impaired finger motion. Based on this systematic analysis and review, hemi-hamate autograft can be considered reliable for the reconstruction of acute and chronic proximal interphalangeal joint fracture-dislocations with joint involvement >50%, but longer-term follow-up studies are required to evaluate its outcome, especially regarding the rate of osteoarthritis. Copyright &© The Author(s) 2014.

Publication type: Journal Article

Source: MEDLINE

33. Title: The innervated gracilis muscle for microsurgical functional lip reconstruction: review of the literature.

Citation: Annals of Plastic Surgery, February 2015, vol./is. 74/2(204-9), 0148-7043;1536-3708 (2015 Feb)

Author(s): Sacak B, Gurunluoglu R

Language: English

Abstract: Reconstruction of the lower and upper lip should meet both aesthetic and functional requirements, whenever possible. Achievement of these goals presents a major challenge particularly in extensive lip defects requiring microsurgical reconstruction. Successful reconstructive outcomes have been reported using free fasciocutaneous flaps such as composite radial forearm flap or anterolateral thigh flap in conjunction with static tendon slings. In recent years, neurovascular gracilis muscle transfer has been introduced in hopes to overcome noncontractile properties of these flaps and to restore oral competence by muscle contractility. This article reviews the available data on the innervated gracilis muscle transfer for functional lip reconstruction. Tips and techniques gleaned from all of the current literature are discussed.
34. Title: Use of autologous fat grafting for breast reconstruction: A systematic review with meta-analysis of oncological outcomes.

Citation: Journal of Plastic, Reconstructive & Aesthetic Surgery: JPRAS, February 2015, vol./is. 68/2(143-61), 1748-6815;1878-0539 (2015 Feb)

Author(s): Agha RA, Fowler AJ, Herlin C, Goodacre TE, Orgill DP

Abstract: BACKGROUND: There is growing interest in the use of autologous fat grafting (AFG) for breast reconstruction. Concerns have been raised regarding its effectiveness and safety. OBJECTIVE: The primary objective was to determine the oncological, clinical, aesthetic and functional, patient reported, process and radiological outcomes of AFG. METHODS: A protocol was published on PROSPERO (CRD42013005254). Types of studies: All original studies. TYPES OF PARTICIPANTS: Women undergoing reconstruction after surgery for breast cancer. Types of Interventions: AFG techniques for reconstruction. Types of outcome measures: Oncological, clinical, aesthetic and functional, patient reported, process and radiological. Search terms and keywords: The search strategy was devised to find papers regarding AFG for breast reconstruction. DATA SOURCES: Electronic databases were searched from 1st January 1986 to 31st March 2014 including: PubMed, MEDLINE, EMBASE, SCOPUS, The Cochrane Library, and clinical trial registries. Identification and selection of studies: Title and abstract screening and full text assessment undertaken separately by independent researchers. Data extraction, collection and management: Data extracted by two researchers and stored in a standardised database. RESULTS: 35 studies were included (3624 patients) with a high degree of patient and surgeon satisfaction over a mean of 1.9 sessions at 18 month follow-up. Fat necrosis was the commonest reported complication (4.4%), biopsy of a subsequent breast lump was required in 2.7% and an interval mammogram in 11.5%. The weighted mean recurrence rate was 4.4% at 24.6 months. Meta-analysis of comparative studies showed no significant difference in oncological event rates between AFG and non-AFG groups (p = 0.10). CONCLUSION: AFG is a potentially useful reconstructive tool, has a relatively low complication rate, with the majority of patients and clinicians satisfied or very satisfied with the results. Long term clinical and radiological follow-up is required. Further research is necessary to confirm oncological ramifications. Copyright © 2014 British Association of Plastic, Reconstructive and Aesthetic Surgeons. Published by Elsevier Ltd. All rights reserved.