

9 References

References have been listed in the order of (1) the first or only author's last name and (2) the year of publication. Identical short references are distinguished in the text by lowercase letters, which if used are listed in parentheses at the end of the respective entry.

Acocella A, Bertolai R, Colafranceschi M, Sacco R. Clinical, histological and histomorphometric evaluation of the healing of mandibular ramus bone block grafts for alveolar ridge augmentation before implant placement. *J Craniomaxillofac Surg.* 2010 Apr; 38(3): 222–230.

Adell R, Lekholm U, Gröndahl K, Bränemark PI, Lindström J, Jacobsson M. Reconstruction of severely resorbed edentulous maxillae using osseointegrated fixtures in immediate autogenous bone grafts. *Int J Oral Maxillofac Implants.* 1990 Fall; 5(3): 233–246.

Aghaloo TL, Moy PK. Which hard tissue augmentation techniques are the most successful in furnishing bony support for implant placement? *Int J Oral Maxillofac Implants.* 2007; 22 Suppl: 49–70.

Al-Nawas B, Brägger U, Meijer HJ, Naert I, Persson R, Perucchi A, Quirynen M, Raghoobar GM, Reichert TE, Romeo E, Santing HJ, Schimmel M, Storelli S, ten Bruggenkate C, Vandekerckhove B, Wagner W, Wismeijer D, Müller F. A double-blind randomized controlled trial (RCT) of titanium-13 zirconium versus titanium grade IV small-diameter bone level implants in edentulous mandibles—results from a 1-year observation period. *Clin Implant Dent Relat Res.* 2012 Dec; 14(6): 896–904.

Anderson JM, Rodriguez A, Chang DT: Foreign body reaction to biomaterials. *Semin Immunol.* 2008 Apr; 20(2): 86–100.

Anitua E, Begoña L, Orive G. Clinical Evaluation of Split-Crest Technique with Ultrasonic Bone Surgery for Narrow Ridge Expansion: Status of Soft and Hard Tissues and Implant Success. *Clin Implant Dent Relat Res.* 2011 (Apr); 15(2): 176–187.

Annibali S, Cristalli MP, Dell'Aquila D, Bignozzi I, La Monaca G, Pilloni A. Short dental implants: a systematic review. *J Dent Res.* 2012 Jan; 91(1): 25–32.

Antoun H, Sitbon JM, Martinez H, Missika P. A prospective randomized study comparing two techniques of bone augmentation: onlay graft alone or associated with a membrane. *Clin Oral Implants Res.* 2001 Dec; 12(6): 632–639.

Araújo MG, Lindhe J. Dimensional ridge alterations following tooth extraction. An experimental study in the dog. *J Clin Periodontol.* 2005 Feb; 32(2): 212–218.

Atieh MA, Zadeh H, Stanford CM, Cooper LF. Survival of short dental implants for treatment of posterior partial edentulism: a systematic review. *Int J Oral Maxillofac Implants.* 2012 Nov–Dec; 27(6): 1323–1331.

Augthun M, Yıldırım M, Spiekermann H, Biesterfeld S. Healing of bone defects in combination with immediate implants using the membrane technique. *Int J Oral Maxillofac Implants.* 1995 Jul–Aug; 10(3): 421–428.

Axhausen G. Histologische Untersuchungen über Knochentransplantationen am Menschen. [Histological studies of bone grafts in humans.] *Deutsche Zeitschrift für Chirurgie.* 1908 Dec; 91(3–4): 388–428.

Bahat O, Fontanessi RV. Efficacy of implant placement after bone grafting for three-dimensional reconstruction of the posterior jaw. *Int J Periodontics Restorative Dent.* 2001 Jun; 21(3): 220–231.

Barone A, Santini S, Sbordone L, Crespi R, Covani U. A clinical study of the outcomes and complications associated with maxillary sinus augmentation. *Int J Oral Maxillofac Implants.* 2006 Jan–Feb; 21(1): 81–85.

Barone A, Ricci M, Mangano F, Covani U. Morbidity associated with iliac crest harvesting in the treatment of maxillary and mandibular atrophies: a 10-year analysis. *J Oral Maxillofac Surg.* 2011 Sep; 69(9): 2298–2304.

Barter S, Stone P, Brägger U. A pilot study to evaluate the success and survival rate of titanium-zirconium implants in partially edentulous patients: results after 24 months of follow-up. *Clin Oral Implants Res.* 2012 Jul; 23(7): 873–881.

Becker J, Al-Nawas B, Klein MO, Schliephake H, Terheyden H, Schwarz F. Use of a new cross-linked collagen membrane for the treatment of dehiscence-type defects at titanium implants: a prospective, randomized-controlled double-blinded clinical multicenter study. *Clin Oral Implants Res.* 2009 Jul; 20(7): 742–749.

- Bell WH, Buche WA, Kennedy JW 3rd, Ampil JP.** Surgical correction of the atrophic alveolar ridge. A preliminary report on a new concept of treatment. *Oral Surg Oral Med Oral Pathol.* **1977** Apr; 43(4): 485 – 498.
- Blanco J, Alonso A, Sanz M.** Long-term results and survival rate of implants treated with guided bone regeneration: a 5-year case series prospective study. *Clin Oral Implants Res.* **2005** Jun; 16(3): 294 – 301.
- Blus C, Szmukler-Moncler S.** Split-crest and immediate implant placement with ultra-sonic bone surgery: a 3-year life-table analysis with 230 treated sites. *Clin Oral Implants Res.* **2006** Dec; 17(6): 700 – 707.
- Bonewald LF.** The amazing osteocyte. *J Bone Miner Res.* **2011** Feb; 26(2): 229 – 238.
- Bornstein M, Cionca N, Mombelli A.** Systemic Conditions and Treatments as Risks for Implant Therapy. *Int J Oral Maxillofac Implants.* **2009;** 24 (Suppl): 12 – 27.
- Bosshardt D, Hjørting-Hansen E, Buser D.** The fate of the autogenous bone graft. *Forum Implantologicum.* **2009;** 5(1): 4 – 11.
- Bosshardt D, Schenk R.** Biologic basis of bone regeneration. In: Buser D (ed.). *20 years of guided bone regeneration in implant dentistry*, 2nd ed. Chicago: Quintessence; **2010**.
- Braut V, Bornstein MM, Lauber R, Buser D.** Bone dimensions in the posterior mandible – a retrospective radiographic study using cone beam computed tomography. Part A: Analysis of the dentate sites. *Int J Periodont Restorative Dent.* **2012** Apr; 32(2): 175 – 184.
- Burchardt H, Enneking WF.** Transplantation of bone. *Surg Clin North Am.* **1978** Apr; 58 (2): 403 – 427.
- Burchardt H.** The biology of bone graft repair. *Clin Orthop Relat Res.* **1983** Apr; (174): 28 – 42.
- Buser D, Brägger U, Lang NP, Nyman S.** Regeneration and enlargement of jaw bone using guided tissue regeneration. *Clin Oral Implants Res* **1990** Dec; 1(1): 22 – 32.
- Buser D, Dula K, Belser U, Hirt HP, Berthold H.** Localized ridge augmentation using guided bone regeneration. I. Surgical procedure in the maxilla. *Int J Periodontics Restorative Dent* **1993;** 13(1): 29 – 45.
- Buser D, Dula K, Belser UC, Hirt HP, Berthold H.** Localized ridge augmentation using guided bone regeneration. II. Surgical procedure in the mandible. *Int J Periodont Rest Dent.* **1995** Feb; 15(1): 13 – 29.
- Buser D, Dula K, Hirt HP, Schenk RK.** Lateral ridge augmentation using autografts and barrier membranes: a clinical study with 40 partially edentulous patients. *J Oral Maxillofac Surg.* **1996** Apr; 54(4): 420 – 432; discussion 432 – 433.
- Buser D, Mericske-Stern R, Bernard JP, Behneke A, Behneke N, Hirt HP, Belser UC, Lang NP.** Long-term evaluation of non-submerged ITI implants. Part 1: 8-year life table analysis of a prospective multi-center study with 2359 implants. *Clin Oral Implants Res.* **1997** Jun; 8(3): 161 – 172.
- Buser D, Ingimarsson S, Dula K, Lussi A, Hirt HP, Belser UC.** Long-term stability of osseointegrated implants in augmented bone: a 5-year prospective study in partially edentulous patients. *Int J Periodontics Restorative Dent.* **2002** Apr; 22(4): 109 – 117.
- Buser D, Martin W, Belser UC.** Optimizing esthetics for implant restorations in the anterior maxilla: Anatomic and surgical considerations. *Int J Oral Maxillofac Implants.* **2004;** 19(suppl): 43 – 61.
- Buser D, Chen ST, Weber HP, Belser UC.** The concept of early implant placement following single tooth extraction in the esthetic zone: Biologic rationale and surgical procedures. *Int J Periodont Rest Dent.* **2008** Oct; 28(5): 440 – 451.
- Buser D.** Implant placement with simultaneous guided bone regeneration: Selection of biomaterials and surgical principles. In: Buser D (ed): *20 years of guided bone regeneration in implant dentistry*. 2nd ed. Chicago: Quintessence; **2009:** 123 – 152.
- Çakır B, Dağıstan S, Miloğlu Ö, Bilge M.** Nonsyndromic oligodontia in permanent dentition: three siblings. *The Internet Journal of Dental Science.* **2006;** 3(2). Retrieved 1 Nov 2011.
- Carpio L, Loza J, Lynch S, Genco R.** Guided bone regeneration around endosseous implants with anorganic bovine bone mineral. A randomized controlled trial comparing bioabsorbable versus non-resorbable barriers. *J Periodontol.* **2000** Nov; 71(11): 1743 – 1749.

- Casentini P, Wismeijer D, Chiapasco M:** Treatment options for the edentulous arch. In: Wismeijer D, Casentini P, Gallucci G, Chiapasco M (eds). Loading protocols in implant dentistry – edentulous patients. ITI Treatment Guide, Vol 4 Berlin: Quintessence; **2010**: 45–56.
- Castagna L, Polido WD, Soares LG, Tinoco EM:** Tomographic evaluation of iliac crest bone grafting and the use of immediate temporary implants to the atrophic maxilla. *Int Oral Maxillofac Surg.* **2013** Sep; 42(9): 1067–1072.
- Cawood JI, Howell RA:** A classification of the edentulous jaws. *Int J Oral Maxillofac Surg.* **1988** Aug; 17(4): 232–236.
- Chaushu G, Blinder D, Taicher S, Chaushu S:** The effect of precise reattachment of the mentalis muscle on the soft tissue response to genioplasty. *J Oral Maxillofac Surg.* **2001** May; 59(5): 510–516; discussion 517.
- Chen S, Buser D:** Recommendations for selecting the treatment approach. In: Buser D, Wismeijer D, Belser UC (eds): Implant placement in post-extraction sites: Treatment options. ITI Treatment Guide, Vol 3. Berlin: Quintessence; **2008**: 38–42, 2008.
- Chen ST, Buser D:** Clinical and esthetic outcomes of implants placed in postextraction sites. *Int J Oral Maxillofac Implants* **2009**; 24 Suppl: 186–217.
- Chiapasco M, Abati S, Romeo E, Vogel G:** Clinical outcome of autogenous bone blocks or guided bone regeneration with e-PTFE membranes for the reconstruction of narrow edentulous ridges. *Clin Oral Implants Res.* **1999** Aug; 10(4): 278–288.
- Chiapasco M, Consolo U, Bianchi A, Ronchi P:** Alveolar distraction osteogenesis for the correction of vertically deficient edentulous ridges: a multicenter prospective study on humans. *Int J Oral Maxillofac Implants* **2004** May–Jun; 19(3): 399–407.
- Chiapasco M, Ferrini F, Casentini P, Accardi S, Zaniboni M:** Dental implants placed in expanded narrow edentulous ridges with the Extension Crest device. A 1–3-year multicenter follow-up study. *Clin Oral Implants Res.* **2006** Jun; 17(3): 265–272. (a)
- Chiapasco M, Zaniboni M, Boisco M:** Augmentation procedures for the rehabilitation of deficient edentulous ridges with oral implants. *Clin Oral Implants Res.* **2006** Oct; 17 Suppl 2: 136–159. (b)
- Chiapasco M, Brusati R, Ronchi P:** Le Fort I osteotomy with interpositional bone grafts and delayed dental implants for the rehabilitation of extremely atrophied maxillae: a 1–9-year clinical follow-up study on humans. *Clin Oral Implants Res.* **2007** Feb; 18(1): 74–85. (a)
- Chiapasco M, Zaniboni M, Rimondini L:** Autogenous onlay bone grafts vs. alveolar distraction osteogenesis for the correction of vertically deficient edentulous ridges: a 2–4-year prospective study on humans. *Clin Oral Implants Res.* **2007** Aug; 18(4): 432–440. (b)
- Chiapasco M, Casentini P, Zaniboni M:** Bone augmentation procedures in implant dentistry. *Int J Oral Maxillofac Implants* **2009**; 24 Suppl: 237–259.
- Chiapasco M, Casentini P, Zaniboni M, Corsi E:** Evaluation of peri-implant bone resorption around Straumann Bone Level implants placed in areas reconstructed with autogenous vertical onlay bone grafts. *Clin Oral Implants Res.* **2012** Sep; 23(9): 1012–1021. (a)
- Chiapasco M, Casentini P, Zaniboni M, Corsi E, Anello T:** Titanium-zirconium alloy narrow-diameter implants (Straumann Roxolid®) for the rehabilitation of horizontally deficient edentulous ridges: prospective study on 18 consecutive patients. *Clin Oral Implants Res.* **2012** Oct; 23(10): 1136–1141. (b)
- Chiapasco M, Autelitano L, Rabbiosi D, Zaniboni M:** The role of pericranium grafts in the reduction of postoperative dehiscences and bone resorption after reconstruction of severely deficient edentulous ridges with autogenous onlay bone grafts. *Clin Oral Implants Res.* **2013** Jun; 24(6): 679–687.
- Clavero J, Lundgren S:** Ramus or chin grafts for maxillary sinus inlay and local onlay augmentation: Comparison of donor site morbidity and complications. *Clin Implant Dent Relat Res.* **2003**; 5: 154–160.
- Colella G, Cannavale R, Pentenero M, Gandolfo S:** Oral implants in radiated patients: a systematic review. *Int J Oral Maxillofac Implants* **2007** Jul–Aug; 22(4): 616–622.
- Cordaro L, Amadé DS, Cordaro M:** Clinical results of alveolar ridge augmentation with mandibular block bone grafts in partially edentulous patients prior to implant placement. *Clin Oral Implants Res.* **2002**; 13: 103–111.

- Cordaro L.** Bilateral simultaneous augmentation of the maxillary sinus floor with particulated mandible. Report of a technique and preliminary results. *Clin Oral Implants Res.* **2003** Apr; 14(2): 201 – 206.
- Cordaro L, Torsello F, Accorsi Ribeiro C, Liberatore M, Mirisola di Torresanto V.** Inlay-onlay grafting for three-dimensional reconstruction of the posterior atrophic maxilla with mandibular bone. *Int J Oral Maxillofac Surg.* **2010** Apr; 39(4): 350 – 357.
- Cordaro L, Torsello F, Miuccio MT, di Torresanto VM, Eliopoulos D.** Mandibular bone harvesting for alveolar reconstruction and implant placement: subjective and objective cross-sectional evaluation of donor and recipient site up to 4 years. *Clin Oral Implants Res.* **2011** Nov; 22(11): 1320 – 1326. (a)
- Cordaro L, Torsello F, Morcavollo S, di Torresanto VM.** Effect of bovine bone and collagen membranes on healing of mandibular bone blocks: a prospective randomized controlled study. *Clin Oral Implants Res.* **2011** Oct; 22(1): 1145 – 1150. (b)
- Cordaro L, Boghi F, Mirisola di Torresanto V, Torsello F.** Reconstruction of the moderately atrophic edentulous maxilla with mandibular bone grafts. *Clin Oral Impl Res.* **2012** Jul 13. [Epub ahead of print] (a)
- Cordaro L, Torsello F, Chen S, Ganeles J, Brägger U, Hämerle C.** Implant-supported single tooth restoration in the aesthetic zone: transmucosal and submerged healing provide similar outcome when simultaneous bone augmentation is needed. *Clin Oral Implants Res.* **2012** Jun 15. [Epub ahead of print] (b)
- Dahlin C, Sennerby L, Lekholm U, Linde A, Nyman S.** Generation of new bone around titanium implants using a membrane technique: An experimental study in rabbits. *Int J Oral Maxillofac Implants.* **1988** Spring; 4(1): 19 – 25.
- Dahlin C, Sennerby L, Lekholm U, Linde A, Nyman S.** Generation of new bone around titanium implants using a membrane technique: an experimental study in rabbits. *Int J Oral Maxillofac Implants.* **1989** Spring; 4(1): 19 – 25.
- Dahlin C, Gottlow J, Linde A, Nyman S.** Healing of maxillary and mandibular bone defects using a membrane technique. An experimental study in monkeys. *Scand J Plast Reconstr Surg Hand Surg.* **1990**; 24(1): 13 – 19.
- Dahlin C, Lekholm U, Becker W, Becker B, Higuchi K, Cal-lens A, van Steenberghe D.** Treatment of fenestration and dehiscence bone defects around oral implants using the guided tissue regeneration technique: a prospective multicenter study. *Int J Oral Maxillofac Implants.* **1995** May – Jun; 10(3): 312 – 318.
- Dahlin C, Lekholm U, Becker W, Becker B, Higuchi K, Cal-lens A, van Steenberghe D.** Treatment of fenestration and dehiscence bone defects around oral implants using the guided tissue regeneration technique: a prospective multicenter study. *Int J Oral Maxillofac Implants.* **1995** May – Jun; 10(3): 312 – 318.
- Dahlin C, Simion M, Hatano N.** Long-term follow-up on soft and hard tissue levels following guided bone regeneration treatment in combination with a xenogeneic filling material: a 5-year prospective clinical study. *Clin Implant Dent Relat Res.* **2010** Dec; 12(4): 263 – 270.
- De Boever AL, De Boever JA.** Guided bone regeneration around non-submerged implants in narrow alveolar ridges: a prospective long-term clinical study. *Clin Oral Implants Res.* **2005** Oct; 16(5): 549 – 556.
- De Santis D, Trevisiol L, D'Agostino A, Cucchi A, De Gemmis A, Nocini PF.** Guided bone regeneration with autogenous block grafts applied to Le Fort I osteotomy for treatment of severely resorbed maxillae: a 4- to 6-year prospective study. *Clin Oral Implants Res.* **2012** Jan; 23(1): 60 – 69.
- Dietrich U, Lippold R, Dirmeier T, Beneke N, Wagner W.** Statistische Ergebnisse zur Implantatprognose am Beispiel von 2017 IMZ-Implantaten unterschiedlicher Indikation der letzten 13 Jahre. *Zeitschrift für zahnärztliche Implantologie.* **1993**; 9: 9 – 18.
- Donos N, Kostopoulos L, Karring T.** Alveolar ridge augmentation using a resorbable copolymer membrane and autogenous bone grafts. An experimental study in the rat. *Clin Oral Implants Res.* **2002** Apr; 13(1): 203 – 213.
- Donovan MG, Dickerson NC, Hanson LJ, Gustafson RB.** Maxillary and mandibular reconstruction using calvarial bone grafts and Branemark implants: a preliminary report. *J Oral Maxillofac Surg* **1994** Jun; 52(6): 588 – 594.
- Edwards SP.** Computer-assisted craniomaxillofacial surgery. *Oral Maxillofac Surg North Am.* **2010** Feb; 22(1): 117 – 134.

- Ellis E** 3rd, McFadden D. The value of a diagnostic setup for full fixed maxillary implant prosthetics. *J Oral Maxillofac Surg.* **2007** Sep; 65(9): 1764–1771.
- Engelstad ME**, Morse T. Anterior iliac crest, posterior iliac crest, and proximal tibia donor sites: a comparison of cancellous bone volumes in fresh cadavers. *J Oral Maxillofac Surg.* **2010** Dec; 68(12): 3015–3021.
- Esposito M**, Grusovin MG, Patel S, Worthington HV, Coulthard P. Interventions for replacing missing teeth: hyperbaric oxygen therapy for irradiated patients who require dental implants. *Cochrane Database Syst Rev.* **2008** Jan 23; (1) CD003603.
- Esposito M**, Cannizzaro G, Bozzoli P, Checchi L, Ferri V, Landriani S, Leone M, Todisco M, Torchio C, Testori T, Galli F, Felice P. Effectiveness of prophylactic antibiotics at placement of dental implants: a pragmatic multicentre placebo-controlled randomised clinical trial. *Eur J Oral Implantol.* **2010** Summer; 3(2): 135–143.
- Fugazzotto PA**. Success and failure rates of osseointegrated implants in function in regenerated bone for 6 to 51 months: a preliminary report. *Int J Oral Maxillofac Implants.* **1997** Jan – Feb; 12(1): 17–24.
- Gaggl A**, Schultes G, Karcher H. Vertical alveolar ridge distraction with prosthetic treatable distractors: a clinical investigation. *Int J Oral Maxillofac Implants.* **2000** Sep – Oct; 15(5): 701–710.
- Gallucci G**, Bernard JP, Belser U. Immediate loading of eight implants in the maxilla and six implants in the mandible and final restoration with three-unit and four-unit FDPs. In: Wismeijer D, Casentini P, Gallucci G, Chiapasco M (eds). *Loading protocols in implant dentistry – edentulous patients. ITI Treatment Guide*, Vol 4. Berlin: Quintessence; **2010**: 177–186.
- Geurs NC**, Korostoff JM, Vassipulos PJ, Kang TH, Jeffcoat M, Kellar R, Reddy MS. Clinical and histological assessment of lateral alveolar ridge augmentation using a synthetic long-term bioresorbable membrane and an allograft. *J Periodontol.* **2008** Jul; 79(7): 1130–1140.
- Gonzalez-Garcia R**, Monje F, Moreno C. Alveolar split osteotomy for the treatment of the severe narrow ridge maxillary atrophy: a modified technique. *Int J Oral Maxillofac Surg.* **2011** Jan; 40(1): 57–64.
- Gottlow J**, Dard M, Kjellson F, Obrecht M, Sennerby L. Evaluation of a new titanium-zirconium dental implant: a biomechanical and histological comparative study in the mini pig. *Clin Implant Dent Relat Res.* **2012** Aug; 14(4): 538–545.
- Grant BT**, Amenedo C, Freeman K, Kraut RA. Outcomes of placing dental implants in patients taking oral bisphosphonates: A review of 115 cases. *J Oral Maxillofac Surg.* **2008** Feb; 66(2): 223–230.
- Hämmerle CH**, Lang NP. Single stage surgery combining transmucosal implant placement with guided bone regeneration and bioresorbable materials. *Clin Oral Implants Res.* **2001**; 12: 9–18.
- Hämmerle CH**, Jung RE, Yaman D, Lang NP. Ridge augmentation by applying bioresorbable membranes and deproteinized bovine bone mineral: a report of twelve consecutive cases. *Clin Oral Implants Res.* **2008** Jan; 19(1): 19–25.
- Heitz-Mayfield LJ**, Huynh-Ba G. History of treated periodontitis and smoking as risks for implant therapy. *Int J Oral Maxillofac Implants.* **2009**; 24 Suppl: 34–68.
- Hürzeler MB**, Kohal RJ, Naghshbandi J, Mota LF, Conradt J, Huttmacher D, Caffesse RG. Evaluation of a new bioresorbable barrier to facilitate guided bone regeneration around exposed implant threads. An experimental study in the monkey. *Int J Oral Maxillofac Surg.* **1998** Aug; 27(4): 315–320.
- Isaksson S**, Ekelund A, Alberius P, Blomqvist JE. Early results from reconstruction of severely atrophic (Class VI) maxillas by immediate endosseous implants in conjunction with bone grafting and Le Fort I osteotomy. *Int J Oral Maxillofac Surg.* **1993** Jun; 22(3): 144–148.
- Jensen J**, Sindet-Pedersen S. Autogenous mandibular bone grafts and osseointegrated implants for reconstruction of the severely atrophied maxilla: a preliminary report. *J Oral Maxillofac Surg.* **1991** Dec; 49(12): 1277–1287.
- Jensen OT**, Cockrell R, Kuhlke L, Reed C. Anterior maxillary alveolar distraction osteogenesis: a prospective 5-year clinical study. *Int J Oral Maxillofac Implants.* **2002** Jan – Feb; 17(1): 52–68.
- Jensen SS**, Yeo A, Dard M, Hunziker E, Schenk R, Buser D. Evaluation of a novel biphasic calcium phosphate in standardized bone defects: a histologic and histomorphometric study in the mandibles of minipigs. *Clin Oral Implants Res.* **2007** Dec; 18(6): 752–760.

- Jensen SS, Terheyden H.** Bone augmentation procedures in localized defects in the alveolar ridge: clinical results with different bone grafts and bone-substitute materials. *Int J Oral Maxillofac Implants.* **2009;** 24 Suppl: 218 – 236.
- Johnston BC, Ma SS, Goldenberg JZ, Thorlund K, Vandvik PO, Loeb M, Guyatt GH.** Probiotics for the prevention of Clostridium difficile-associated diarrhea: a systematic review and meta-analysis. *Ann Intern Med.* **2012 Dec;** 157(12): 878 – 888.
- Jung R, Haig GA, Thoma DS, Häggerle CH.** A randomized, controlled clinical trial to evaluate a new membrane for guided bone regeneration around dental implants. *Clin Oral Implants Res.* **2009 Feb;** 20(2): 162 – 168.
- Kahnberg KE, Nilsson P, Rasmusson L.** Le Fort I osteotomy with interpositional bone grafts and implants for rehabilitation of the severely resorbed maxilla: a 2-stage procedure. *Int J Oral Maxillofac Implants.* **1999 Jul – Aug;** 14(4): 571 – 578.
- Karageorgiou V, Kaplan D.** Porosity of 3D biomaterial scaffolds and osteogenesis. *Biomaterials.* **2005 Sep;** 26(27): 5474 – 5491.
- Katsuyama H, Jensen SS.** Treatment options for sinus floor elevation. In: Chen S, Buser D, Wismeijer D (eds): Sinus floor elevation procedures. ITI Treatment Guide, Vol 5. Berlin: Quintessenz; **2011:** 33 – 57.
- Kleinheinz J, Büchter A, Kruse-Lösler B, Weingart D, Joos U.** Incision design in implant dentistry based on vascularization of the mucosa. *Clin Oral Impl Res.* **2005 Oct;** 16(5): 518 – 523.
- Kobayashi E, Matsumoto S, Doi H, Yoneyama T, Hamanaka H.** Mechanical properties of the binary titanium-zirconium alloys and their potential for biomedical materials. *J Biomed Mater Res.* **1995 Aug;** 29(8): 943 – 950.
- Kumar MN, Honne T.** Survival of dental implants in bisphosphonate users versus non-users: a systematic review. *Eur J Prosthodont Restor Dent.* **2012 Dec;** 20(4): 159 – 162.
- Langer B.** Spontaneous *in situ* gingival augmentation. *Int J Periodontics Restorative Dent.* **1994 Dec;** 14(6): 524 – 535.
- Li KK, Stephens WL, Gliklich R.** Reconstruction of the severely atrophic edentulous maxilla using Le Fort I osteotomy with simultaneous bone graft and implant placement. *J Oral Maxillofac Surg.* **1996 May;** 54(5): 542 – 546.
- Llambes F, Silvestre FJ, Caffesse R.** Vertical guided bone regeneration with bioabsorbable barriers. *J Periodontol.* **2007 Oct;** 78(10): 2036 – 2042.
- Lorenzoni M, Pertl C, Polansky R, Wegscheider W.** Guided bone regeneration with barrier membranes—a clinical and radiographic follow-up study after 24 months. *Clin Oral Implants Res.* **1999 Feb;** 10(1): 16 – 23.
- Lundgren S, Nyström E, Nilson H, Gunne J, Lindhagen O.** Bone grafting to the maxillary sinuses, nasal floor and anterior maxilla in the atrophic edentulous maxilla. *Int J Oral Maxillofac Surg.* **1997 Dec;** 26(6): 428 – 434.
- Lundgren S, Sennerby L.** Bone Reformation. Contemporary bone augmentation procedures in oral and maxillofacial implant surgery. Berlin: Quintessenz; **2008.**
- Lundgren S, Sjöström M, Nyström E, Sennerby L.** Strategies in reconstruction of the atrophic maxilla with autogenous bone grafts and endosseous implants. *Periodontol 2000.* **2008;** 47: 143 – 161.
- Maiorana C, Beretta M, Salina S, Santoro F.** Reduction of autogenous bone graft resorption by means of Bio-Oss coverage: a prospective study. *Int J Periodontics Restorative Dent.* **2005 Feb;** 25(1): 19 – 25.
- Marchetti C, Corinaldesi G, Pieri F, Degidi M, Piattelli A.** Alveolar distraction osteogenesis for bone augmentation of severely atrophic ridges in 10 consecutive cases: a histologic and histomorphometric study. *J Periodontol.* **2007 Feb;** 78(2): 360 – 366.
- Mardas N, Kostopoulos L, Stavropoulos A, Karring T.** Evaluation of a cell-permeable barrier for guided tissue regeneration combined with demineralized bone matrix. *Clin Oral Implants Res.* **2003 Dec;** 14(6): 812 – 828.
- Martin WC, Morton D, Buser D.** Pre-operative analysis and prosthetic treatment planning in esthetic implant dentistry. In: Buser D, Belser UC, Wismeijer D (eds): ITI Treatment Guide, Vol 1: Single tooth replacement in the anterior maxilla. Berlin: Quintessenz; **2006:** 9 – 24.

- Marx RE.** Pamidronate (Aredia) and zoledronate (Zometa) induced avascular necrosis of the jaws: A growing epidemic. *J Oral Maxillofac Surg.* 2003 Sep; 61(9): 1115–1118.
- McGrath CJ, Schepers SH, Blijdorp PA, Hoppenreijts TJ, Erbe M.** Simultaneous placement of endosteal implants and mandibular onlay grafting for treatment of the atrophic mandible. A preliminary report. *Int J Oral Maxillofac Surg.* 1996 Jun; 25(3): 184–188.
- Meijndert L, Raghoobar GM, Schupbach P, Meijer HJ, Vis-sink A.** Bone quality at the implant site after reconstruction of a local defect of the maxillary anterior ridge with chin bone or deproteinised cancellous bovine bone. *Int J Oral Maxillofac Surg.* 2005 Dec; 34(8): 877–884.
- Merli M, Migani M, Esposito M.** Vertical ridge augmentation with autogenous bone grafts: resorbable barriers supported by osteosynthesis plates versus titanium-reinforced barriers. A preliminary report of a blinded, randomized controlled clinical trial. *Int J Oral Maxillofac Implants.* 2007 May–Jun; 22(3): 373–382.
- Milinkovic I, Cordaro L.** Are there specific indications for the different bone augmentation procedures? A systematic review. *Int J Oral Maxillofac Surg.* 2013 (submitted for publication).
- Miron RJ, Hedbom E, Saulacic N, Zhang Y, Sculean A, Bosshardt DD, Buser D.** Osteogenic potential of autogenous bone grafts harvested with four different surgical techniques. *J Dent Res.* 2011 Dec; 90(2): 1428–1433.
- Misch CE.** Bone classification, training keys to implant success. *Dent Today.* 1989 May; 8(4): 39–44.
- Nemcovsky CE, Artzi Z, Moses O, Gelernter I.** Healing of dehiscence defects at delayed-immediate implant sites primarily closed by a rotated palatal flap following extraction. *Int J Oral Maxillofac Implants.* 2000 Jul–Aug; 15(4): 550–558.
- Neyt LF, De Clercq CA, Abeloos JV, Mommaerts MY.** Reconstruction of the severely resorbed maxilla with a combination of sinus augmentation, onlay bone grafting, and implants. *J Oral Maxillofac Surg.* 1997 Dec; 55(12): 1397–1401.
- Nissan J, Ghelfan O, Mardinger O, Calderon S, Chaushu G.** Efficacy of cancellous block allograft augmentation prior to implant placement in the posterior atrophic mandible. *Clin Implant Dent Relat Res.* 2011 Dec; 13(4): 279–285.
- Nkenke E, Schultze-Mosgau S, Radespiel-Tröger M, Kloss F, Neukam FW.** Morbidity of harvesting of chin grafts: A prospective study. *Clin Oral Implants Res.* 2001; 12: 495–502.
- Nyman S, Lang NP, Buser D, Brägger U.** Bone regeneration adjacent to titanium dental implants using guided tissue regeneration: a report of two cases. *Int J Oral Maxillofac Implants.* 1990 Spring; 5(1): 9–14.
- Nyman, SR, Lang NP.** Guided tissue regeneration and dental implants. *Periodontology 2000.* 1994; 4: 109–118.
- Nyström E, Nilson H, Gunne J, Lundgren S.** Reconstruction of the atrophic maxilla with interpositional bone grafting/Le Fort I osteotomy and endosteal implants: an 11–16 year follow-up. *Int J Oral Maxillofac Surg.* 2009 Jan; 38(1): 1–6.
- Oates TW.** Bisphosphonates: a hindrance or a help? *Int J Oral Maxillofac Implants.* 2013 May–Jun; 28(3): 655–657.
- Park SH, Lee KW, Oh TJ, Misch CE, Shotwell J, Wang HL.** Effect of absorbable membranes on sandwich bone augmentation. *Clin Oral Implants Res.* 2008 Jan; 19 (1): 32–41.
- Parodi R, Carusi G, Santarelli G, Nanni F.** Implant placement in large edentulous ridges expanded by GBR using a bioresorbable collagen membrane. *Int J Periodontics Restorative Dent.* 1998 Jun; 18(3): 266–275.
- Peleg M, Chaushu G, Blinder D, Taicher S.** Use of lyodura for bone augmentation of osseous defects around dental implants. *J Periodontol.* 1999 Aug; 70(8): 853–860.
- Proussaefs P, Lozada J.** The use of intraorally harvested autogenous block grafts for vertical alveolar ridge augmentation: A human study. *Int J Periodontics Restorative Dent.* 2005; 25: 351–363.
- Rachmiel A, Srouji S, Peled M.** Alveolar ridge augmentation by distraction osteogenesis. *Int J Oral Maxillofac Surg.* 2001 Dec; 30(6): 510–517.
- Raghoobar GM, Louwerse C, Kalk WW, Vissink A.** Morbidity of chin bone harvesting. *Clin Oral Implants Res.* 2001; 12: 503–507.
- Ramel CF, Wismeijer DA, Hämerle CH, Jung RE.** A randomized, controlled clinical evaluation of a synthetic gel membrane for guided bone regeneration around dental implants: clinical and radiologic 1- and 3-year results. *Int J Oral Maxillofac Implants.* 2012 Mar–Apr; 27(2): 435–441.

- Reissmann DR, Dietze B, Vogeler M, Schmelzeisen R, Heydecke G.** Impact of donor site for bone graft harvesting for dental implants on health-related and oral health-related quality of life. *Clin Oral Implants Res.* **2013** Jun; 24(6): 698 – 705.
- Robiony M, Zorzan E, Polini F, Sembronio S, Toro C, Politi M.** Osteogenesis distraction and platelet-rich plasma: combined use in restoration of severe atrophic mandible. Long-term results. *Clin Oral Implants Res.* **2008** Nov; 19(11): 1202 – 1210.
- Rocchietta I, Fontana F, Simion, M.** Clinical outcomes of vertical bone augmentation to enable dental implant placement: a systematic review. *J Clin Periodontol.* **2008**; 35: 203 – 215.
- Roccuzzo M, Ramieri G, Bunino M, Berrone S.** Autogenous bone graft alone or associated with titanium mesh for vertical alveolar ridge augmentation: a controlled clinical trial. *Clin Oral Implants Res.* **2007** Jun; 18(3): 286 – 294.
- Roccuzzo M, Wilson TG Jr:** A prospective study of 3 weeks' loading of chemically modified titanium implants in the maxillary molar region: 1-year results; *Int J Oral Maxillofac Implants.* **2009** Jan – Feb; 24(1): 65 – 72.
- Sanz I, Garcia-Gargallo M, Herrera D, Martin C, Figueiro E, Sanz M.** Surgical protocols for early implant placement in post-extraction sockets: a systematic review. *Clin Oral Implants Res.* **2012** Feb; 23 Suppl 5: 67 – 79.
- Scheerlinck LM, Muradin MS, van der Bilt A, Meijer GJ, Koole R, Van Cann EM.** Donor site complications in bone grafting: comparison of iliac crest, calvarial, and mandibular ramus bone; *Int J Oral Maxillofac Implants.* **2013** Jan – Feb; 28(1): 222 – 227.
- Schenk RK, Buser D, Hardwick WR, Dahlin C.** Healing pattern of bone regeneration in membrane-protected defects. A histologic study in the canine mandible. *Int J Oral Maxillofac Implants.* **1994** Jan; 9(1): 13 – 29.
- Schettler D.** Sandwich-Technik mit Knorpeltransplantat zur Alveolarkammerhöhung im Unterkiefer. [Sandwich technique with cartilage transplant for raising the alveolar process in the lower jaw]. *Fortschr Kiefer Gesichtschir.* **1976**; 20: 61 – 63.
- Schratt HE, Regel G, Kiesewetter B, Tscherne H.** HIV-Infektion durch kältekonservierte Knochentransplantate. [HIV infection caused by cold preserved bone transplants.] *Unfallchirurg.* **1996** Sep; 99(9): 679 – 684.
- Schwartz-Arad D, Levin L.** Intraoral autogenous block onlay bone grafting for extensive reconstruction of atrophic maxillary alveolar ridges. *J Periodontol.* **2005** Apr; 76(4): 636 – 641.
- Sethi A, Kaus T.** Maxillary ridge expansion with simultaneous implant placement: 5-year results of an ongoing clinical study. *Int J Oral Maxillofac Implants.* **2000** Jul – Aug; 15(4): 491 – 499.
- Sethi A, Kaus T.** Ridge augmentation using mandibular block bone grafts: Preliminary results of an ongoing prospective study. *Int J Oral Maxillofac Implants.* **2001** May – Jun; 16(3): 378 – 388.
- Simion M, Jovanovic SA, Tinti C, Benfenati SP.** Long-term evaluation of osseointegrated implants inserted at the time or after vertical ridge augmentation. A retrospective study on 123 implants with 1 – 5 years follow-up. *Clin Oral Implants Res.* **2001** Feb; 12(1): 35 – 45.
- Simion M, Fontana F, Rasperini G, Maiorana C.** Vertical ridge augmentation by expanded-polytetrafluoroethylene membrane and a combination of intraoral autogenous bone graft and deproteinized anorganic bovine bone (Bio Oss). *Clin Oral Implants Res.* **2007** Oct; 18(5): 620 – 629.
- Simonds RJ.** HIV transmission by organ and tissue transplantation. *AIDS.* **1993** Nov; 7 Suppl 2: S35 – 38.
- Simonpieri A, Del Corso M, Sammartino G, Dohan Ehrenfest DM.** The relevance of Choukroun's platelet-rich fibrin and metronidazole during complex maxillary rehabilitations using bone allograft. Part I: a new grafting protocol. *Implant Dent.* **2009** Apr; 18(2): 102 – 111.
- Smolka W, Bosshardt DD, Mericske-Stern R, Iizuka T.** Reconstruction of the severely atrophic mandible using calvarial split bone grafts for implant-supported oral rehabilitation. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* **2006** Jan; 101(1): 35 – 42.
- Sohn DS, Lee HJ, Heo JU, Moon JW, Park IS, Romanos GE.** Immediate and delayed lateral ridge expansion technique in the atrophic posterior mandibular ridge. *J Oral Maxillofac Surg.* **2010** Sep; 68(9): 2283 – 2290.
- Springer IN, Terheyden H, Geiss S, Härtle F, Hedderich J, Açıł Y.** Particulated bone grafts—effectiveness of bone cell supply. *Clin Oral Implants Res.* **2004** Apr; 15(2): 205–212.

- Steiner M, Ramp WK.** Endosseous dental implants and the glucocorticoid-dependent patient. *J Oral Implantol.* **1990;** 16(3): 211–217.
- Stellingsma K, Slagter AP, Stegenga B, Raghoebar GM, Meijer HJ.** Masticatory function in patients with an extremely resorbed mandible restored with mandibular implant-retained overdentures: comparison of three types of treatment protocols. *J Oral Rehabil.* **2005 Jun;** 32(6): 403–410.
- Stewart RE, Witkop Jr CJ, Bixler D.** The dentition and anomalies of tooth size, form, structure, and eruption. In: Stewart RE, Barber TK, Troutman KC, Wei SHY, eds. *Pediatric Dentistry: Scientific Foundations of Clinical Procedures.* 1st ed. St. Louis: CV Mosby; **1982:** 87–109.
- Stoelinga PJ, Slagter AP, Brouns JJ.** Rehabilitation of patients with severe (Class VI) maxillary resorption using Le Fort I osteotomy, interposed bone grafts and endosteal implants: 1–8 years follow-up on a two-stage procedure. *Int J Oral Maxillofac Surg.* **2000 Jun;** 29(3): 188–193.
- Sun HL, Huang C, Wu YR, Shi B.** Failure rates of short (≤ 10 mm) dental implants and factors influencing their failure: a systematic review. *Int J Oral Maxillofac Implants.* **2011 Jul–Aug;** 26(4): 816–825.
- Tan WC, Ong M, Han J, Mattheos N, Pjetursson BE, Tsai AY, Sanz I, Wong MC, Lang NP; on behalf of the ITI Antibiotic Study Group.** Effect of systemic antibiotics on clinical and patient-reported outcomes of implant therapy—a multicenter randomized controlled clinical trial. *Clin Oral Implants Res.* **2013 Jan 24.** [Epub ahead of print]
- Telleman G, Raghoebar GM, Vissink A, den Hartog L, Huddleston Slater JJ, Meijer HJ.** A systematic review of the prognosis of short (<10 mm) dental implants placed in the partially edentulous patient. *J Clin Periodontol.* **2011 Jul;** 38(7): 667–676.
- Terheyden H.** Knochenaugmentationen in der Implantologie. [Bone augmentation in implantology.] *Dtsch Zahnärztl Z* **2010;** 65: 320–331.
- Todisco M.** Early loading of implants in vertically augmented bone with non-resorbable membranes and deproteinised anorganic bovine bone. An uncontrolled prospective cohort study. *Eur J Oral Implantol.* **2010 Spring;** 3(1): 47–58.
- Triplett RG, Schow SR.** Autologous bone grafts and endosseous implants: complementary techniques. *J Oral Maxillofac Surg.* **1996 Apr;** 54(4): 486–494.
- Urist MR.** Bone: formation by autoinduction. *Science* **1965;** 150: 893–899.
- van Steenberghe D, Callens A, Geers L, Jacobs R.** The clinical use of deproteinized bovine bone mineral on bone regeneration in conjunction with immediate implant installation. *Clin Oral Implants Res.* **2000 Jun;** 11(3): 210–216.
- Vignoletti F, Matesanz P, Rodrigo D, Figuero E, Martin C, Sanz M.** Surgical protocols for ridge preservation after tooth extraction. A systematic review. *Clin Oral Implants Res.* **2012 Feb;** 23 Suppl 5: 22–38.
- von Arx T, Wallkamm B, Hardt N.** Localized ridge augmentation using a micro titanium mesh: a report on 27 implants followed from 1 to 3 years after functional loading. *Clin Oral Implants Res.* **1998 Apr;** 9(2): 123–130.
- von Arx T, Cochran DL, Hermann J, Schenk RK, Higginbottom F, Buser D.** Lateral ridge augmentation and implant placement: an experimental study evaluating implant osseointegration in different augmentation materials in the canine mandible. *Int J Oral Maxillofac Implants.* **2001 May–Jun;** 16(3): 343–354.
- von Arx T, Hafliger J, Chappuis V.** Neurosensory disturbances following bone harvesting in the symphysis: a prospective clinical study. *Clin Oral Implants Res.* **2005 Aug;** 16(4): 432–439.
- von Arx T, Buser D.** Horizontal ridge augmentation using autogenous block grafts and the guided bone regeneration technique with collagen membranes: A clinical study with 42 patients. *Clin Oral Implants Res.* **2006 Aug;** 17(4): 359–366.
- von Arx T, Buser D.** Guided bone regeneration and autogenous block grafts for horizontal ridge augmentation: a staged approach. In: Buser D (ed): *20 years of guided bone regeneration in implant dentistry.* 2nd ed. Chicago: Quintessence; **2009,** 195–229.
- Wallace S, Gellin R.** Clinical evaluation of freeze-dried cancellous block allografts for ridge augmentation and implant placement in the maxilla. *Implant Dent.* **2010 Aug;** 19(4): 272–279.

- Wang HL, Weber D, McCauley LK.** Effect of long-term oral bisphosphonates on implant wound healing: literature review and a case report. *J Periodontol.* 2007 Mar; 78(3): 584–594.
- Weingart D, ten Bruggenkate CM.** (2000), Treatment of fully edentulous patients with ITI implants . Clinical Oral Implants Research. **2000;** 11 Suppl 1: 69–82.
- Widmark G, Ivanoff CJ.** Augmentation of exposed implant threads with autogenous bone chips: prospective clinical study. *Clin Implant Dent Relat Res.* **2000;** 2(4): 178–183.
- Wilfong J, Jätschmann N, Hedderich J, Neukam FW, Schlegel KA, Gierloff M.** Effect of deproteinized bovine bone matrix coverage on the resorption of iliac cortico-spongyous bone grafts—a prospective study of two cohorts. *Clin Oral Implants Res.* **2012** Nov 27. doi: 10.1111/cir.12074. [Epub ahead of print]
- Yildirim M, Hanisch O, Spiekermann H.** Simultaneous hard and soft tissue augmentation for implant-supported single-tooth restorations. *Pract Periodontics Aesthet Dent.* **1997** Nov–Dec; 9(9): 1023–1031.
- Zitzmann NU, Naef R, Schärer P.** Resorbable versus non-resorbable membranes in combination with Bio-Oss for guided bone regeneration. *Int J Oral Maxillofac Implants.* **1997** Nov–Dec; 12(6): 844–852.