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Knut. A. Grötz[1,2], Christian Walter[2], Bilal Al-Nawas[2]
Implantate bei Patienten mit Chemotherapie oder Bisphosphonat-Medikation

1. Al-Nawas B, Grötz KA. Prospective study of the long term change of the oral flora after radiation therapy. Support Care Cancer 2006; 14: 291 – 6
2. Bamias A, Kastritis E, Bamia C et al. Osteonecrosis of the Jaw in Cancer After Treatment With Bisphosphonates: Incidence and Risk Factors. J Clin Oncol 2005; 23: 8580 – 7
3. Carter G, Goss AN, Doecke C: Bisphosphonates and avascular necrosis of the jaw: A possible association. Med J Aust 2005; 182:413-415
4. Carter GD, Gross AN. Bisphosphonates and avascular necrosis of the jaws. Aust Dent J 2003; 48: 268
5. Degidi M, Piattelli A.Immediately loaded bar-connected implants with an anodized surface inserted in the anterior mandible in a patient treated with diphosphonates for osteoporosis:a case report with a 12-month follow-up. Clin Implant Dent Relat Res. 2003; 5: 269 – 72.
6. Denissen H, Montanari C, Martinetti R, van Lingen A, van den Hooff A. Alveolar bone response to submerged bisphosphonate-complexed hydroxyapatite implants. J Periodontol. 2000; 71: 279 – 86
7. Denissen H, van Beek E, van den Bos T, de Blieck J, Klein C, van den Hooff A. Degradable bisphosphonate-alkaline phosphatase-complexed hydroxyapatite implants in vitro. J Bone Miner Res. 1997; 12: 290 – 7
8. Diel IJ, Bergner R, Grötz KA. Bisphosphonate und ihre häufigsten Nebenwirkungen. J Onkologie 2005; 5: 6 – 12
9. Dimopoulos MA, Kastritis E, Anagnostopoulos A, Melakopoulos I, Gika D, Moulopoulos LA, Bamia C, Terpos E, Tsionos K, Bamias A. Osteonecrosis of the jaw in patients with multiple myeloma treated with bisphosphonates: evidence of increased risk after treatment with zoledronic acid. Haematologica 2006; 91: 968–71
10. El-Shinnawi UM, El-Tantawy SI. The effect of alendronate sodium on alveolar bone loss in periodontitis (clinical trial). J Int Acad Periodontol 2003; 5: 5-10
11. 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.
12. Grötz KA Zahnärztliche Betreuung von Patienten mit tumortherapeutischer Kopf-Hals-Bestrahlung (Gemeinsame wissenschaftliche Stellungnahme der DGZMK und DEGRO). Dtsch Zahnärztl Z 2002; 57: 509 – 11 u. Strahlenther Onkol 2003; 179: 275 – 8. www.dgzmk.de
13. Grötz KA, Al-Nawas B. „Persisting alveolar sockets" – A radiologic symptom of Bisphosphonat associated osteonecrosis of the jaw (BP-ONJ)? J Oral Maxillofac Surg 2006; 64: 1571 – 2
14. Grötz KA, Diel IJ. Osteonekrose des Kiefers unter Bisphosphonat-Langzeittherapie. Im Focus Onkologie 2005; 8: 52 – 5

15. Grötz KA, Kreusch T. Zahnärztliche Betreuung von Patienten unter/nach Bisphosphonat-Medikation (Wissenschaftliche Stellungnahme der DGZMK, AG Kieferchirurgie und DGMKG). Dtsch Zahnärztl Z 2006; 61: 510-3. www.dgzmk.de

16. Grötz KA, Walter C, Küttner C, Al-Nawas B. Zur Relevanz einer Bisphosphonat-Langzeittherapie bei der Strahlentherapie enossaler Kiefermetastasen. Strahlenth Onkol 2007; 183: 190 – 4

17. Grötz KA. Prophylaxe und Therapie der Folgen therapeutischer Tumor-Bestrahlung im Mund-Kiefer-Gesichtsbereich. Quintessenz Berlin 2001b

18. Hoefert S, Eufinger H. Mögliche unerwünschte Wirkung von Bisphosphonaten im Kieferbereich. Zahnäztl Mittl 2004; 19: 50 – 4

19. Ihara K, Goto M, Miyahara A, Toyota J, Katsuki T.: Multicenter experience with maxillary prostheses supported by Branemark implants: a clinical report. Int J Oral Maxillofac Implants. 1998 Jul-Aug;13(4):531-8.

20. Jeffcoat MK. Safety of oral bisphosphonates: controlled studies on alveolar bone. Int J Oral Maxillofac Implants 2006; 21: 349 – 53

21. Komatsubara S, Mori S, Mashiba T et al. Suppressed bone turnover by long-term bisphosphonate treatment accumulates microdamage but maintains intrinsic material properties in cortical bone of dog rib. J Bone Miner Res 2004; 19: 999 – 1005

22. Kovacs AF.: Clinical analysis of implant losses in oral tumor and defect patients. Clin Oral Implants Res. 2000 Oct;11(5):494-504.

23. Kovacs AF.: Influence of chemotherapy on endosteal implant survival and success in oral cancer patients. Int J Oral Maxillofac Surg. 2001 Apr;30(2):144-7.

24. Marx RE. Pamidronate (Aredia) and Zoledronate (Zometa) induced avascular necrosis of the jaws: A growing epidemic. J Oral Maxillofac Surg 2003; 61: 1115–7

25. McDonald AR, Pogrel MA, Sharma A.: ffects of chemotherapy on osseointegration of implants: a case report. J Oral Implantol. 1998;24(1):11-3.

26. Melo MD, Obeid G: Osteonecrosis of the maxilla in a patient with a history of bisphosphonate therapy. J Can Dent Assoc 2005; 71: 111 – 3

27. Migliorati CA. Bisphosphonates and oral cavity avascular bone necrosis. J Clin Incol 2003; 22: 4253 – 4

28. Moy PK, Medina D, Shetty V, Aghaloo TL.: Int J Oral Maxillofac Implants. 2005 Jul-Aug;20(4):569-77. Dental implant failure rates and associated risk factors.

29. Purcell PM, Boyd IW: Bisphosphonates and osteonecrosis of the jaw. Med J Aust 2005; 182: 417 – 8

30. Rosen LS, Gordon D, Tchekmedyian NS, et al. Long-term efficacy and safety of zoledronic acid in the treatment of skeletal metastases in patients with nonsmall cell lung carcinoma and other solid tumors: A randomized, phase III, double-blind, placebo-controlled trial. Cancer 2004; 100: 2613 – 21

31. Ruggiero SL, Mehrota B, Rosenberg TJ et al.. Osteonecrosis of the jaws associated with the use of bisphosphonates: A review of 63 cases. J Oral Maxillofac Surg 2004; 62: 527 – 34

32. Saad F, Gleason DM, Murray R, et al. Long-term efficacy of zoledronic acid for the prevention of skeletal complications in patients with metastatic hormonerefractory prostate cancer. J Natl Cancer Inst 2004; 96: 879 – 82

33. Schmid P: Pharmakologie der Bisphosphonate. In: Schmid P, Possinger K (Hrsg.) Supportive Therapie von Knochenmetastasen. Uni-Med Verlag Bremen, London, Boston, 2. Auflage 2005, S. 78 – 90.

34. Starck WJ, Epker B. Failure of osseointegrated dental implants after diphosphonate therapy for osteoporosis - a case report, Int J Oral Maxillofac Implants 1995; 10: 74 – 6

35. Steiner M, Windchy A, Gould AR, Kushner GM, Weber R: Effects of chemotherapy in patients with dental implants. J Oral Implantol. 1995;21(2):142-7.

36. Tarassoff P, Csermak K. Avascular necrosis of the jaws: Risk factors in metastatic cancer patients. J Oral Maxillofac Surg 2003; 61: 1238 – 9

37. Teronen O, Konttinen YT, Lindqvist C, Salo T, Ingman T, Lauhio A, Ding Y, Santavirta S, Sorsa T. Human neutrophil collagenase MMP-8 in peri-implant sulcus fluid and its inhibition by clodronate. J Dent Res. 1997; 76: 1529 – 37

38. Tokugawa Y, Shirota T, Ohno K, Yamaguchi A. Effects of bisphosphonate on bone reaction after placement of titanium implants in tibiae of ovariectomized rats. Int J Oral Maxillofac Implants. 2003; 18: 66 – 74

39. van Steenberghe D, Jacobs R, Desnyder M, Maffei G, Quirynen M.: The relative impact of local and endogenous patient-related factors on implant failure up to the abutment stage. Clin Oral Implants Res. 2002 Dec;13(6):617-22.

40. Wagner W, Kuffner HD, Hartmann U. Der bestrahlte Patient als Risikopatient bei zahnärztlich-chirurgischen Eingriffen. Dtsch Zahnärztl Z 1986; 41: 440 – 3

41. Zervas K, Verrou E, Teleioudis Z, Vahtsevanos K, Banti A, Mihou D, Krikelis D, Terpos E. Incidence, risk factors and management of osteonecrosis of the jaw in patients with multiple myeloma: a single-centre experience in 303 patients. Br J Haematol 2006; 134: 620 – 3