

Wie eine verfrühte Füllungstherapie vermieden werden kann
Kariesdiagnoseverfahren und differenzierte Kariestherapie

PD Dr. Klaus Neuhaus, MMA MMS

Literatur

- [1] Marcenes, W. et al., Global burden of oral conditions in 1990-2010: a systematic analysis. *J Dent Res*, 2013. 92(7):592-7.
- [2] Fünfte Deutsche Mundgesundheitsstudie (Kurzversion):
https://www.bzaek.de/fileadmin/PDFs/dms/Zusammenfassung_DMS_V.pdf.
- [3] Nyvad, B., [Caries in the elderly: diagnosis and treatment]. *Tandlaegebladet*, 1987. 91(8):353-8.
- [4] Topping, G. V. et al., Clinical visual caries detection. *Monogr Oral Sci*, 2009. 21:15-41.
- [5] Nyvad, B., V. Machiulskiene, and V. Baelum, Reliability of a new caries diagnostic system differentiating between active and inactive caries lesions. *Caries Res*, 1999. 33(4):252-60.
- [6] Eichenberger, M. et al., Influence of loupes and age on the near visual acuity of practicing dentists. *J Biomed Opt*, 2011. 16(3):035003.
- [7] Eichenberger, M. et al., Visual Acuity and Experience with Magnification Devices in Swiss Dental Practices. *Oper Dent*, 2015. 40(4):E142-9.
- [8] Perrin, P. et al., Visual acuity and magnification devices in dentistry. *Swiss Dent J*, 2016. 126(3):222-35.
- [9] Perrin, P. et al., Visual acuity of dentists in their respective clinical conditions. *Clin Oral Investig*, 2014. 18(9):2055-8.
- [10] Chandler, N.P., A.R. Gray, and C.M. Murray, Eyesight: a study of the staff of a dental school. *BDJOpen*, 2017. 3:17008.
- [11] Perrin, P. et al., A near visual acuity test for dentists. *Oper Dent*, 2017. (akzeptiert)
- [12] Neuhaus, K.W. et al., Impact of different magnification levels on visual caries detection with ICDAS. *J Dent*, 2015. 43(12):1559-64.
- [13] Eichenberger, M. et al., Visual acuity of dentists under simulated clinical conditions. *Clin Oral Investig*, 2013. 17(3):725-9.

- [14] Neuhaus, K.W., E. Jasarevic, and A. Lussi, Impact of Different Illumination Conditions on Visual Caries Detection with ICDAS. *Caries Res*, 2015. 49(6):633-6.
- [15] Nyvad, B., V. Machiulskiene, and V. Baelum, Construct and predictive validity of clinical caries diagnostic criteria assessing lesion activity. *J Dent Res*, 2003. 82(2):117-22.
- [16] Ekstrand, K.R., D.N. Ricketts, and E.A. Kidd, Occlusal caries: pathology, diagnosis and logical management. *Dent Update*, 2001. 28(8):380-7.
- [17] Neuhaus, K.W. et al., Removal of enamel caries with an air abrasion powder. *Oper Dent*, 2010. 35(5):538-46.
- [18] Neuhaus, K.W. et al., Traditional lesion detection aids. *Monogr Oral Sci*, 2009. 21:42-51.
- [19] Lussi, A., Comparison of different methods for the diagnosis of fissure caries without cavitation. *Caries Res*, 1993. 27(5):409-16.
- [20] Kuhnisch, J. et al., Effects of dental probing on occlusal surfaces – a scanning electron microscopy evaluation. *Caries Res*, 2007. 41(1):43-8.
- [21] Nyvad, B., Diagnosis versus detection of caries. *Caries Res*, 2004. 38(3):192-8.
- [22] Kidd, E.A. and N.B. Pitts, A reappraisal of the value of the bitewing radiograph in the diagnosis of posterior approximal caries. *Br Dent J*, 1990. 169(7):195-200.
- [23] Wenzel, A., Bitewing and digital bitewing radiography for detection of caries lesions. *J Dent Res*, 2004. 83 Spec No C:C72-5.
- [24] Machiulskiene, V., B. Nyvad, and V. Baelum, A comparison of clinical and radiographic caries diagnoses in posterior teeth of 12-year-old Lithuanian children. *Caries Res*, 1999. 33(5):340-8.
- [25] Hintze, H., A. Wenzel, and B. Danielsen, Behaviour of approximal carious lesions assessed by clinical examination after tooth separation and radiography: a 2.5-year longitudinal study in young adults. *Caries Res*, 1999. 33(6):415-22.
- [26] Brägger, U. et al., Qualitätsleitlinien: Radiologie und Strahlenschutz. *Schweiz Monatsschr Zahnmed*, 2005. 115(7):25-35.
- [27] Espelid, I. et al., EAPD guidelines for use of radiographs in children. *Eur J Paediatr Dent*, 2003. 4(1):40-8.
- [28] Pendlebury, M.E. et al., Selection criteria for dental radiography. 2nd ed. 2004.

- [29] Affairs, A.D.A.C.o.S., The use of dental radiographs: update and recommendations. *J Am Dent Assoc*, 2006. 137(9):1304-1312.
- [30] Neuhaus, K.W. et al., Novel lesion detection aids. *Monogr Oral Sci*, 2009. 21:52-62.
- [31] Kuhnisch, J. et al., In vivo validation of near-infrared light transillumination for interproximal dentin caries detection. *Clin Oral Investig*, 2016. 20(4):821-9.
- [32] Huth, K.C. et al., In vivo performance of a laser fluorescence device for the approximal detection of caries in permanent molars. *J Dent*, 2010. 38(12):1019-26.
- [33] Huth, K.C. et al., Clinical performance of a new laser fluorescence device for detection of occlusal caries lesions in permanent molars. *J Dent*, 2008. 36(12):1033-40.
- [34] Lussi, A. and E. Hellwig, Performance of a new laser fluorescence device for the detection of occlusal caries in vitro. *J Dent*, 2006. 34(7):467-71.
- [35] Lussi, A. et al., Clinical performance of a laser fluorescence device for detection of occlusal caries lesions. *Eur J Oral Sci*, 2001. 109(1):14-9.
- [36] Rodrigues, J.A. et al., Evaluation of laser fluorescence in monitoring non-cavitated caries lesion progression on smooth surfaces in vitro. *Lasers Med Sci*, 2017.
- [37] Lussi, A. et al., Influence of professional cleaning and drying of occlusal surfaces on laser fluorescence in vivo. *Caries Res*, 2005. 39(4):284-6.
- [38] Neuhaus, K.W. et al., Evaluation of perpendicular reflection intensity for assessment of caries lesion activity/inactivity. *Caries Res*, 2011. 45(4):408-14.