

Department of Pediatric Dentistry

Supervisors

Prof. Dr. Ş.İlknur TANBOĞA

Prof. Dr. H. Serap AKYÜZ

Prof. Dr. Ali Recai MENTEŞ

Prof. Dr. Betül KARGÜL

Assoc. Prof. M. Sertaç PEKER

Assoc. Prof. Başak DURMUŞ

Research Areas:

Special Care Dentistry, Children with special needs/Medically compromised

Laser

Preventive Dentistry

Public Health and Epidemiology

Cariology

Fluoride

Genetics related to Dentistry

Developmental Defects, Heritable Dental Anomalies

Early Childhood Caries

Restorative Dentistry

Dental Traumatology

Dental Materials

Diagnosis and treatment planning

Behavioural sciences and patient management, Anxiety, Dental Fear

Preventive orthodontics

Oral pathology

Pulp Therapy for Primary and Immature Permanent Teeth

Acquired Temporomandibular Disorders in Infants, Children, and Adolescents

Nutrition

StemCells

Recent Publications (2013- 2017)

- Abbasoğlu Z, Tanboğa İ, Küchler EC, Deeley K, Weber M, Kaspar C, Korachi M, Vieira AR. Early childhood caries is associated with genetic variants in enamel formation and immune response genes. *Caries Res.* 2015;49(1):70-7. doi:10.1159/000362825. Epub 2014 Dec 18. PubMed PMID: 25531160; PubMed Central PMCID:PMC4376372.
- Tanboga I, Durhan MA, Durmus B, Marks LA. Temporomandibular disorders in young people with an intellectual disability: prevalence of signs and symptoms. *Eur J Paediatr Dent.* 2014 Dec;15(4):349-54. PubMed PMID: 25517578.
- Peker S, Kargul B, Tanboga I, Tunali-Akbay T, Yarat A, Karakoc F, Ersu R, Dagli E. Oral health and related factors in a group of children with cystic fibrosis in Istanbul, Turkey. *Niger J Clin Pract.* 2015 Jan-Feb;18(1):56-60. doi: 10.4103/1119-3077.146980. PubMed PMID: 25511345.
- Giray FE, Duzdar L, Oksuz M, Tanboga I. Evaluation of the bond strength of resin cements used to lute ceramics on laser-etched dentin. *Photomed Laser Surg.* 2014 Jul;32(7):413-21. doi: 10.1089/pho.2013.3701. PubMed PMID: 24992276; PubMed Central PMCID: PMC4082358.
- Durmus B, Tanboga I. In vivo evaluation of the treatment outcome of pulpotomy in primary molars using diode laser, formocresol, and ferric sulphate. *Photomed Laser Surg.* 2014 May;32(5):289-95. doi: 10.1089/pho.2013.3628. Epub 2014 Apr 9. PubMed PMID: 24717147; PubMed Central PMCID: PMC4010162.
- Durmus B, Pekel B, Ugurlu F, Tanboga I. Outcome of a dentigerous cyst following decompression using a removable appliance: a case report. *Oral Health Dent Manag.* 2014 Mar;13(1):87-90. PubMed PMID: 24603922.
- Taşlı PN, Tapşın S, Demirel S, Yalvaç ME, Akyuz S, Yarat A, Sahin F. Isolation and Characterization of Dental Pulp Stem Cells from a Patient with Papillon-Lefèvre Syndrome. *J Endod.* 2013 Jan;39(1):31-8. doi: 10.1016/j.joen.2012.09.024. Epub 2012 Oct 24. PMID:23228254
- Yarat A, Saçan Ö, Akyuz S, Alev B, Pişiriciler R, Yanardağ R.: In vitro effect of aqueous plant extracts on antioxidant parameters in saliva. *Journal of Medicinal Plants Research* 2013 7(39): 118-125
- Ulucan, K., Kuyumcu, F., Egil, E., Karahan, M., Akyuz, S., Kadir, T., Yarat, A. In vitro effects of two pulp capping materials (mineral trioxide aggregate and calcium hydroxide) on mononuclear leucocyte apoptosis. *Fresenius Environmental Bulletin (FEB) Vol 22 No.8: 2221-2225, 2013.*
- Ulucan, K., Akyuz, S., Ozbay, G., Pekiner, FN., Guney, AI. Evaluation of Vitamin D Receptor (VDR) Gene Polymorphisms (FokI, TaqI and ApaI) in a family with dentinogenesis imperfecta. *Cytology and Genetics, 2013, 47(5): 282-286.*
- Demirci S., Kaya M.S., Doğan A., Kalay Ş., Altın N.Ö., Yarat A., Akyuz S., Şahin F. Antibacterial and cytotoxic properties of boron-containing dental composite. *Turk J Biol.* 39: 417-426, 2015.
- Aksit Bıçak D, Akyuz S, Kıratlı B, Usta M, Urgancı N, Alev B, Yarat A, Sahin F. The investigation of *Helicobacter pylori* in the dental biofilm and saliva samples of children with dyspeptic complaints. *BMC Oral Health.* 2017 Mar 21;17(1):67. doi:

10.1186/s12903-017-0361-x. PubMed PMID: 28327128; PubMed Central PMCID: PMC5361728.

- Koç Öztürk L, Yarat A, Akyuz S, Furuncuoglu H, Ulucan K. Investigation of the N-terminal coding region of MUC7 alterations in dentistry students with and without caries. *Balkan J Med Genet*. 2016 Aug 2;19(1):71-76. eCollection 2016 Jul PubMed PMID: 27785410; PubMed Central PMCID: PMC5026282.
- Demirel, S., Yalvac, M. E., Tapsin, S., Akyuz, S., Ak, E., Cetinel, S., Sahin, F.. Tooth replantation with adipose tissue stem cells and fibrin sealant: microscopic analysis of rat's teeth. *SpringerPlus*, 5(1), 1-7, 2016.
- Haznedaroglu E, Menten A. The Internet versus pediatricians as a source of infant teething information for parents in Turkey. *Clinics (Sao Paulo)*. 2016 Aug;71(8):430-4. doi: 10.6061/clinics/2016(08)04. PubMed PMID: 27626472; PubMed Central PMCID: PMC4975784.
- Haznedaroglu E, Güner Ş, Duman C, Menten A. A 48-month randomized controlled trial of caries prevention effect of a one-time application of glass ionomer sealant versus resin sealant. *Dent Mater J*. 2016 Jun 1;35(3):532-8. Doi:10.4012/dmj.2016-084. Epub 2016 Apr 16. PubMed PMID: 27086573.
- Güner Ş, Uyar-Bozkurt S, Haznedaroglu E, Menten A. Dental Fluorosis and Catalase Immunoreactivity of the Brain Tissues in Rats Exposed to High Fluoride Pre- and Postnatally. *Biol Trace Elem Res*. 2016 Nov;174(1):150-157. Epub 2016 Apr PubMed PMID: 27052310.
- Haznedaroglu E, Koldemir-Gündüz M, Bakır-Coşkun N, Bozkuş HM, Çağatay P, Süsleyici-Duman B, Menten A. Association of sweet taste receptor gene polymorphisms with dental caries experience in school children. *Caries Res*. 2015;49(3):275-81. doi: 10.1159/000381426. Epub 2015 Apr 24. PubMed PMID:25924601.
- Haznedaroglu E, Sozkes S, Menten AR. Microhardness evaluation of enamel adjacent to an improved GIC sealant after different enamel pre-treatment procedures. *Eur J Paediatr Dent*. 2014 Dec;15(4):397-400. PubMed PMID: 25517588.
- Kolip D, Yılmaz N, Gökkaya B, Kulan P, Kargul B, MacDonald KW, Cadieux PA, Burton JP, James KM. Efficacy of Dentaq® Oral and ENT Health Probiotic Complex on Clinical Parameters of Gingivitis in Patients Undergoing Fixed Orthodontic Treatment: A Pilot Study. *J Clin Dent*. 2016 Sep;27(3):66-70. PubMed PMID:28390199.
- Bakkal M, Abbasoglu Z, Kargul B. The Effect of Casein Phosphopeptide-Amorphous Calcium Phosphate on Molar-Incisor Hypomineralisation: A Pilot Study. *Oral Health Prev Dent*. 2017 Mar 20. doi: 10.3290/j.ohpd.a37928. [Epub ahead of print] PubMed PMID: 28322360.
- Durmus B, Giray F, Peker S, Kargul B. Clinical Evaluation of a Fissure Sealant Placed by Acid Etching or Er: YAG Laser Combined with Acid Etching. *Oral Health Prev Dent*. 2017 Mar 20. doi: 10.3290/j.ohpd.a37927. [Epub ahead of print] PubMed PMID: 28322359.
- Kulan P, Karabiyik O, Kose GT, Kargul B. The effect of accelerated mineraltrioxide

aggregate on odontoblastic differentiation in dental pulp stem cell niches. *Int Endod J.* 2017 Jan 24. doi: 10.1111/iej.12747. [Epub ahead of print] PubMed PMID: 28117904.

- Durmus B, Durhan A, Gökkaya B, Kitiki B, Yanıkoğlu F, Kargül B. A novel quantitative light-induced fluorescence device for monitoring molar-incisor hypomineralization. *Niger J Clin Pract.* 2017 Jan;20(1):71-76. doi:10.4103/1119-3077.178914. PubMed PMID: 27958250.
- Gokkaya B, Kargul B. Prevalence and Pattern of Non-Syndromic Hypodontia in a Group of Turkish Children. *Acta Stomatol Croat.* 2016 Mar;50(1):58-64. doi:10.15644/asc50/1/8. PubMed PMID: 27688427; PubMed Central PMCID: PMC5017276.
- Kulan P, Karabiyik O, Kose GT, Kargul B. Biocompatibility of Accelerated Mineral Trioxide Aggregate on Stem Cells Derived from Human Dental Pulp. *J Endod.* 2016 Feb;42(2):276-9. doi: 10.1016/j.joen.2015.10.015. Epub 2015 Dec 2. PubMed PMID: 26654139.
- Gokkaya B, Kargul B. Prevalence of concomitant hypo-hyperdontia in a group of Turkish orthodontic patients. *Eur Arch Paediatr Dent.* 2016 Feb;17(1):53-7. doi:10.1007/s40368-015-0201-0. Epub 2015 Sep 29. PubMed PMID: 26420263.
- Gökkaya B, Motro M, Kargül B. Prevalence and characteristics of non-syndromic hypodontia among Turkish orthodontic patient population. *J Int Soc Prev Community Dent.* 2015 May-Jun;5(3):170-5. doi: 10.4103/2231-0762.159952. PubMed PMID:26236675; PubMed Central PMCID: PMC4515798.
- Bekiroglu N, Mete S, Ozbay G, Yalcinkaya S, Kargul B. Evaluation of panoramic radiographs taken from 1,056 Turkish children. *Niger J Clin Pract.* 2015 Jan-Feb;18(1):8-12. doi: 10.4103/1119-3077.146965. PubMed PMID: 25511336.
- Dasdag S, Yavuz I, Bakkal M, Kargul B. Effect of long term 900 MHz radiofrequency radiation on enamel microhardness of rat's teeth. *Oral Health Dent Manag.* 2014 Sep;13(3):749-52. PubMed PMID: 25284551.
- Giray FE, Peker S, Durmus B, Kargül B. Microleakage of new glass ionomer restorative materials in permanent teeth. *Eur J Paediatr Dent.* 2014 Jun;15(2):122-6. PubMed PMID: 25102460.
- Ozbay G, Kitiki B, Peker S, Kargul B. Apical Sealing Ability of a Novel Material: Analysis by Fluid Filtration Technique. *Acta Stomatol Croat.* 2014 Jun;48(2):132-9. PubMed PMID: 27688357; PubMed Centra PMCID: PMC4872797.
- Peker S, Mete S, Gokdemir Y, Karadag B, Kargul B. Related factors of dental caries and molar incisor hypomineralisation in a group of children with cystic fibrosis. *Eur Arch Paediatr Dent.* 2014 Aug;15(4):275-80. doi:10.1007/s40368-014-0112-5. Epub 2014 Feb 26. PubMed PMID: 24569937.
- Ercalikyalcinkaya S, Dumlu A, Bekiroglu N, Kizilyel G, Kargul B. Demirjian's system for estimating dental age among Northwestern Turkish children aged 4-16 years. *Eur J Paediatr Dent.* 2013 Sep;14(3):225-30. PubMed PMID: 24295009.
- Ozbay G, Bakkal M, Abbasoglu Z, Demirel S, Kargul B, Welbury R. Incidence and

prevention of traumatic injuries in paediatric handball players in Istanbul, Turkey. Eur Arch Paediatr Dent. 2013 Feb;14(1):41-5. doi:10.1007/s40368-012-0005-4. Epub 2013 Jan 30. PubMed PMID: 23532813.

- Yalcinkaya SE, Berker YG, Peker S, Basturk FB. Knowledge and attitudes of Turkish endodontists towards digital radiology and cone beam computed tomography. Niger J Clin Pract. 2014 Jul-Aug;17(4):471-8. doi: 10.4103/1119-3077.134044. PubMed PMID: 24909472.