

Einfluss der Schmerzempfindlichkeit und der Lidrandempfindlichkeit auf den subjektiven spontanen Tragekomfort bei formstabilen Kontaktlinsen

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Literatur

- [1] Müller L. Corneal nerves: structure, contents and function. *Exp Eye Res.* 2003;76(5):521–542.
- [2] Rozsa AJ, Beuerman RW. Density and organization of free nerve endings in the corneal epithelium of the rabbit. *Pain.* 1982;14(2):105–120.
- [3] Navascues-Cornago M, Maldonado-Codina C, Morgan PB. Mechanical sensitivity of the human conjunctiva. *Cornea.* 2014;33(8):855–859.
- [4] McGowan DP, Lawrenson JG, Ruskell GL. Touch sensitivity of the eyelid margin and palpebral conjunctiva. *Acta Ophthalmologica.* 1994;72(1):57–60.
- [5] Millodot M, Henson B, O’Leary D. Measurement of corneal sensitivity and thickness with PMMA and Gaspermeable Contact Lenses. 1979:1–5.
- [6] Lum E, Golebiowski B, Gunn R, Babhoota M, Swarbrick H. Corneal sensitivity with contact lenses of different mechanical properties. *Optom Vis Sci.* 2013;90(9):954–960.
- [7] Bergenske PD, Polse KA. The effect of rigid gas permeable lenses on corneal sensitivity. *J Am Optom Assoc.* 1987;58(3):212–215.
- [8] Murphy PJ, Patel S, Marshall J. The effect of long-term, daily contact lens wear on corneal sensitivity. *Cornea.* 2001;20(3):264–269.
- [9] Lowther GE, Hill RM. Sensitivity threshold of the lower lid margin in the course of adaptation to contact lenses. *American Journal of Optometry and Archives of American Academy of Optometry.* 1968;45(9):587–594.
- [10] Miller WL, Clemmons ML. Eyelid margin and initial RGP comfort: Poster # 75 (CL-397). *Optom Vis Sci.* 1995;72(12):228.
- [11] Bennett ES, Stulc S, Bassi CJ, et al. Effect of patient personality profile and verbal presentation on successful rigid contact lens adaptation, satisfaction and compliance. *Optom Vis Sci.* 1998;75(7):500–505.
- [12] Ruscheweyh R, Marziniak M, Stumpfenhorst F, Reinholz J, Knecht S. Pain sensitivity can be assessed by self-rating: Development and validation of the Pain Sensitivity Questionnaire. *Pain.* 2009;146(1-2):65–74.
- [13] Li W, Graham AD, Lin MC. Understanding ocular discomfort and dryness using the pain sensitivity questionnaire. Lin H, ed. *PLoS ONE.* 2016;11(5):e0154753.
- [14] Korb DR, Herman JP, Blackie CA, et al. Prevalence of lid wiper epitheliopathy in subjects with dry eye signs and symptoms. *Cornea.* 2010;29(4):377–383.
- [15] Golebiowski B, Chim K, So J, Jalbert I. Lid margins: sensitivity, staining, meibomian gland dysfunction, and symptoms. *Optom Vis Sci.* 2012;89(10):1–7.
- [16] Shiraishi A, Yamaguchi M, Ohashi Y. Prevalence of upper- and lower-lid-wiper epitheliopathy in contact lens wearers and non-wearers. *Eye & Contact Lens: Science & Clinical Practice.* 2014;40(4):220–224.
- [17] Schulze M-M, Srinivasan S, Hickson-Curran SB, et al. Lid wiper epitheliopathy in soft contact lens wearers. *Optom Vis Sci.* 2016;93(8):943–954.
- [18] Cochet P, Bonnet R. L’esthésiométrie cornéenne. Réalisation et intérêt pratique. *Bulletin Societes d’Ophtalmologie de France.* 1961;Vol6:541–550.
- [19] Nosch DS, Ong GL, Mavrikakis I, Morris J. The application of a computerised videokeratography (CVK) based contact lens fitting software programme on irregularly shaped corneal surfaces. *Cont Lens Anterior Eye.* 2007;30(4):239–248.
- [20] Patel SV, McLaren JW, Hodge DO, Bourne WM. Confocal microscopy in vivo in corneas of long-term contact lens wearers. *Invest Ophthalmol Vis Sci.* 2002;43(4):995–1003.
- [21] Belmonte C, Garcia-Hirschfeld J, Gallar J. Neurobiology of ocular pain. *Prog Retin Eye Res.* 1997;16(1):117–156.
- [22] Gallar J, Pozo MA, Tuckett RP, Belmonte C. Response of sensory units with unmyelinated fibres to mechanical, thermal and chemical stimulation of the cat’s cornea. *J Physiol (Lond).* 1993;468:609–622.
- [23] Polse KA. Etiology of corneal sensitivity changes accompanying contact lens wear. *Invest Ophthalmol Vis Sci.* 1978;17(12):1202–1206.
- [24] Stapleton F, Golebiowski B, Skotnitsky C, Tan ME, Holden BA. Corneal and conjunctival sensitivity in intolerant contact lens wearers. *Journal of Optometry.* 2015;8(1):62–63. doi:10.1016/j.optom.2014.05.004.
- [25] McGrath PA. Psychological aspects of pain perception. *Arch Oral Biol.* 1994;39 Suppl:55S–62S.
- [26] Fillingim RB, King CD, Ribeiro-Dasilva MC, Rahim-Williams B, Riley JL. Sex, gender, and pain: a review of recent clinical and experimental findings. *J Pain.* 2009;10(5):447–485.
- [27] Gibson SJ, Helme RD. Age-related differences in pain perception and report. *Clin Geriatr Med.* 2001;17(3):433–56–v–vi.
- [28] Washington LL, Gibson SJ, Helme RD. Age-related differences in the endogenous analgesic response to repeated cold water immersion in human volunteers. *Pain.* 2000;89(1):89–96.
- [29] Lautenbacher S. Experimental approaches in the study of pain in the elderly. *Pain Med.* 2012;13 Suppl 2:S44–S50.
- [30] Kosek E, Ordeberg G. Abnormalities of somatosensory perception in patients with painful osteoarthritis normalize following successful treatment. *Eur J Pain.* 2000;4(3):229–238.