Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Conclusions: The nerve plexus of P-DE patients appears to be different from that of controls. It seems that the presence of dendritic cells, related to inflammation, is associated with symptoms, corneal nerves and corneal epithelium integrity.

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Covid-19 protective measures, teleworking and face masks: the effect on dry eye in contact lens and non-contact lens wearers
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Purpose: To evaluate how covid-19 protective measures in Greece, especially teleworking and use of face masks, affect dry eye syndrome (DES) in contact lens (CLW) and non-contact lens (non-CLW) wearers.

Methods: In this cross-sectional study, two specially modified and reliable (Cronbach's Alpha) questionnaires were distributed electronically. The effects of teleworking, use of face masks and their combination on DES were studied. Amongst others, face mask use and duration, change of workplace and type of CL used were investigated. ANOVA statistics, x² tests and non-parametric tests were performed.

Results: 121 subjects completed the study, 44 CLW and 77 non-CLW. In the CLW group, teleworking showed statistically significant higherDES (p = 0.011). Additionally, dryer workplace (p = 0.007) and use of frequent replacement contact lenses (CL) other than monthlylies (p = 0.014) increased DES. In the non-CLW group, teleworking (p < 0.0001) and the combination of teleworking and use of face masks (p = 0.003) showed statistically significant higher DES. Longer teleworking hours led to higher DES (p = 0.034) and higher eye discomfort (p = 0.015); when this was combined with face masks, the eye discomfort was even higher (p = 0.038). Finally, in between CLW and non-CLW, when they were under the combination of teleworking and face mask use, a statistically significant difference in eye discomfort (p < 0.0001) and in eye dryness (p = 0.010) was found, with very intense symptoms (p = 0.007 and 0.009 respectively).

Conclusions: Analogous to international studies, face mask use and lengthy use of electronic devices led to elevated DES in both CLW and non-CLW; the novelty of this study is that examines also the two in combination. The even higher eye discomfort found should motivate CL practitioners to inform CLW and non-CLW better during this covid-19 pandemic.

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Defining the Montreal Experience: A Customized Approach to Myopia Control. Part I- Basic Principles And Treatment Algorithm
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Purpose: To evaluate the efficacy of a customized approach on axial length progression.

Methods: The EOUM approach is based on 3 pillars: normal binocular function (BV), control of the central and peripheral blur, and of the environment. Myopia control is achieved with the use of optical devices designed to get the highest convex power possible in the pupil area, without inducing blur at distance, and with no impact on BV function. MCS are selected on the rate of progression, age of myopia onset, corneal parameters, pupil area, risk factor for ocular pathology, patient’s lifestyle and compliance. In this presentation (part 1), decision tree to determine which modality will be used is explained. Customization of OK lenses (7 curves) is detailed. To evaluate the efficacy of this approach, a retrospective study was conducted. Data are extracted from the file of each patient who: (1) consulted EOUM between Jan 2017 and Dec 2018 and (2) were kept under the same MCS (same design/concentration). Clinical population is composed of 310 patients (35% Caucasian; 45% Asian), with a median age of 11. The treatment options were orthokeratology (OK- 4 designs; N=140), multifocal soft contact lenses (SMCL; 5 designs; N=128), and low dose atropine (LDA 0.01% to 0.05%; N=42).

Results: Overall results indicate that AL growth was the lowest when using OK lenses (0.129/0.292 mm [95%CI 0.100-0.158/0.257-0.336] vs SMCL (0.176/0.359 mm [95%CI 0.143-0.210/0.305-0.412) or LDA (0.196/0.374 mm [95%CI 0.143-0.250/0.288-0.460). This OK advantage was statistically significant at 1 year vs SMCL (p = 0.033) or LDA (0.034), but became not significant after 2 years (SMCL p = 0.055; LDA p = 0.100). SMCL was comparable to LDA at 1 year (p = 0.540) and after 2 years (p = 0.767).

Conclusions: Montreal experience reveals that personalized MCS is effective to control myopia. It brings AL evolution comparable to that of a non-myopic population.

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Development and exploration of the content validity of a dry eye questionnaire: A qualitative study
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Purpose: To describe the symptoms and impact of dry eye disease (DED) and confirm the content validity of a dry eye questionnaire.

Methods: This was a cross-sectional, non-interventional, qualitative study in DED patients recruited from clinical sites in the US/Canada. Participants aged ≥18 years, with documented diagnosis of DED and ≥2 current dry eye symptoms (e.g. discomfort, dryness) were included. First part: concept elicitation (CE) via telephonic interview with open-ended questions to explore symptoms/impact of DED on daily life. Second part: in-person 2-hour cognitive interview (CI) to review draft questionnaire completion. Data were analyzed using MaxQDA v.11.

Results: CE interviews from 38 participants were analyzed (mean ±SD age, 64.4±9.9 years; female, 84.2%) that included various dry eye subtypes (DED, 42.1%; Sjögren’s syndrome [SS], 34.2%; meibomian gland dysfunction [MGD], 23.7%; MGD+SS, 2.6%) and severity. Concepts elicited were divided into 4 domains (symptoms/visual activities/copinmg methods/sensitivity to environmental factors). Overall, the most frequently reported symptom was eyes feeling gritty/sandy (65.8%), difficulty with visual activities was reading (81.6%), coping method was using eye drops (94.7%), and sensitivity to environment concept was visual tasks (68.4%); frequencies varied among subgroups (DED/MGD/SS). Questionnaire was tested in 44 CIs, with substantial revisions implemented per participant feedback. In general, instructions were revised for clarity/conciseness, and format was changed from grid to gated questions across modules. In symptom module, 19 items were retained and symptom frequency was included with severity. Five activities at different distances (e.g. watching television, using computer) and difficulty level (e.g. very/moderately difficult) were retained in visual domain. In coping module, 4 activities to alleviate dry eye symptoms were retained; in environment module, 4 factors were retained and recall period was increased from 24 hours to 1 week.

Conclusions: This study supports the content validity of dry eye questionnaire.

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