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Lack of influence of spherical correction in high ametropias using frequency doubling technology exam

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Methods: Twenty patients with high spherical ametropias underwent FDT exams (threshold C-20) with and without correction. To minimized learning, all patients performed a screening test before starting the study. The sequence of exams was randomized. A ranking of agreement between the two exams was performed from 0 to 4 according to the adjacency of significant points and level of significance (0 meaning exact agreement). Only left eyes were included. Statistic analysis was performed with paired t-test and linear regression. Results: Age ranged from 13 to 73 years old (mean of 46,66 +/-18,23). Spherical equivalent ranged from +13,00 to -16,25D (mean of -6,81D +/- 8,83). There was no difference regarding mean of MD, with or without correction (-7,05 dB +/- 6,13 and -6,99 dB +/- 6,22 respectively, p= 0,918) as also for mean of PSD (6,19 dB +/- 1,905 and 6,609 dB +/- 3,037; p= 0,469). There was no significant association between the ranking of agreement and the spherical equivalent (R-Sq = 0,2%, p= 0,866).

<u>Conclusions</u>: FDT exams with or without spherical equivalent correction in high ametropias present similar results.