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ELECTRORETINOGRAPHIC FINDINGS IN PATIENTS WITH LOW-DOSAGE TAMOXIFEN TREATMENT. J. M. Pereira, A. Berezovsky, P.Y. Sacai, M. Motono, C. Erwenne, S. R. Salomão. Clinical Electrophysiology of Vision Lab, Dept. of Ophthalmology, Federal Univ of São Paulo, São Paulo, São Paulo, Brazil. Purpose. Tamoxifen is a specific antiestrogen used in the treatment of breast cancer. The drug was initially considered relatively safe, with few adverse effects, Its chemical structure is similar to drugs with well known ocular toxicity, such as chloroquine. The purpose of this study was to determine retinal toxicity by full-field and focal electroretinograms (ERGs) in a cohort of patients treated with low-dosage tamoxifen (20mg/dialy) for breast cancer. Methods. Full-field and focal ERGs were obtained from 3 different groups. Group I - 14 females (47-72 years, mean 58.3± 9.1) with a normal fundus, treated with tamoxifen from 2 to 37 months. Group II -10 females (39-65 years, mean 50.1± 8.7) with previous breast cancer diagnosis who didn't receive tamoxifen as treatment until ERG testing. Group III- 13 normal female volunteers (41-81 years, mean 52.7± 12.1). Peak-to-peak amplitude and b-wave implicit time were measured and statistically analyzed (one-way ANOVA). Results: Mean peak-to-peak amplitudes (mV) and implicit time (ms) from full-field and focal ERGs were comparable for the 3 different groups. Results with mean and respective standard deviation are shown on the following table for the five different standardized ERG responses: scotopic rod, maximal response, oscillatory potentials, single-flash cone response and 30 Hz flicker.

	Rod Max	OP	Cone	Flicker	Ampl	IT	Amp	Amp	IT	Amp	IT
Group I	180±50	89±6	308±79	104±40	81±24	28±1	55±16	29±1			
Group II	195±35	85±7	361±78	126±46	100±28	28±1	68±16	28±1			
Group III	184±44	92±11	293±81	114±60	104±58	29±1	66±34	29±2			

For focal ERG, mean peak-to-peak amplitudes (mV) were 247±40, 301±69 and 296±50 respectively. Implicit times (ms) were 29±2, 28±2 and 28±5 respectively. Conclusions: Low-dosage tamoxifen showed no retinotoxic effect in this small group of women with breast cancer. Follow-up investigation, as well as multifocal ERG could provide a better understanding of these effects. Supported by FAPESP 01/03364-6 to S. R. Salomão