Interhemispheric and sex differences in the visual evoked response recovery cycle

Lolas,

The recovery cycle of the flash-evoked response was studied in 6 female and 6 male right-handed subjects of comparable age. The aim of the study was to evidence possible interhemispheric differences between occipital leads. Two flashes, presented at graded time intervals between 20 and 150 msec, allowed the computation of an amplitude ratio between the second and the first evoked response, considering the III-IV peak-to-peak amplitude. A faster recovery was found for the left hemisphere, with more pronounced interhemispheric differences in male than in female subjects. Women showed a more reduced amplitude recovery than men and a somewhat different time-course of the recovery function. Women also showed less waveshape similarity between evoked responses elicited by the second of a pair of flashes in the right and left hemisphere. These findings are discussed in terms of differences in speed of information processing by both cerebral hemispheres. It is suggested that recovery cycle stud