

Acupuncture treatment of keratoconjunctivitis sicca

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Introduction. The aim of this study was to investigate the objective and subjective effects of sensory nerve stimulation on patients with dry eye syndrome.

Materials and methods. The authors evaluated the efficacy of acupuncture as a method of sensory nerve stimulation in a group of 20 patients, 17 females and three males with ages ranged from 31 to 79 years (mean 58 years) with keratoconjunctivitis sicca (KCS) diagnosed according to the Copenhagen criteria (1). The patients were randomly assigned to an acupuncture treatment group or to a control group only receiving their ordinary tear substitutes. The effects were evaluated by a detailed ocular examination including dry eye tests (break up time (BUT), Schirmer's 1 test (S1T) and rose bengal staining (RBS), a validated questionnaire of subjective symptoms based partly upon the Workshop's achievements (2), visual analogue scale (VAS) recordings transformed into "better", "worse" or "not changeable" and registration of drop frequency.

Ten sessions of manual acupuncture treatments were given, once to twice a week. Follow-up was done two-three weeks after finishing the treatment of acupuncture and after a mean period of eight months.

Results. Six patients in the acupuncture treatment group felt better after finishing the treatment and no one felt worse. In the control group no one felt better and two patients felt worse during the same period of time ($p < 0,036$). However, acupuncture was no more effective than receiving only artificial tear drops in increasing tear quality as indicated by BUT, in increasing tear secretion, as indicated by S1T or in decreasing ocular surface disease, as indicated by RBS. No statistical significance could be found concerning any change of the total amount of subjective symptoms or drop frequency.

Discussion and conclusions. The best way to evaluate clinical efficacy is perhaps to observe subjective symptoms and functional lifestyle by using validated questionnaire since clinical findings and subjective symptoms in dry eye patients do not correlate with each other (3). As the results indicate that sensory nerve stimulation has a beneficial effect on subjective symptoms of patients with KCS, acupuncture could be tried as a complement to ordinary treatment.

References

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