Acupuncture versus metoprolol in migraine prophylaxis: a randomized trial of trigger point inactivation.


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OBJECTIVES. To compare the effects of dry needling of myofascial trigger points in the neck region to metoprolol in migraine prophylaxis.

DESIGN. Randomized, group comparative study. Patients, investigator and statistician were blinded as to treatment, the therapist was blinded as to results.

SETTING. Outpatient pain clinic in the northern Copenhagen area. Patients were referred by general practitioners or respondents to newspaper advertisements.

SUBJECTS. Included were patients with a history of migraine with or without aura for at least 2 years. Excluded were persons with contraindications against treatment with beta blockers, chronic pain syndromes, pregnancy or previous experience with acupuncture or beta-blocking agents. A total of 85 patients were included; 77 completed the study.

INTERVENTIONS. After a 4-week run-in period, patients were allocated to a 17-week regimen either with acupuncture and placebo tablets or to placebo stimulation and metoprolol 100 mg daily.

RESULTS. Both groups exhibited significant reduction in attack frequency (P < 0.01). No difference was found between the groups regarding frequency (P > 0.20) or duration (P > 0.10) of attacks, whereas we found a significant difference in global rating of attacks in favour of metoprolol (P < 0.05).

CONCLUSIONS. Trigger point inactivation by dry needling is a valuable supplement to the list of migraine prophylactic tools, being equipotent to metoprolol in the influence on frequency and duration (but not severity) of attacks, and superior in terms of negative side-effects.