

in connection with the first pneumococcal vaccination at three months of age in child healthcare.

Method: The study included 72 children who, at three months of age received their first pneumococcal vaccine (Prevenar 13®). The children were randomized, 36 children received pneumococcal vaccination with placebo cream and the other 36 children received the intervention, Emla®-cream.

Result: The result shows that anesthetic cream Emla® significantly reduces pain when FLACC is used as a pain assessment tool and the children begin to cry significantly later than children who received placebo cream. An interesting secondary finding of the study was that the younger the child was the stronger was the reaction to pain.

Conclusion: The infant needs to be treated as an autonomous individual with full integrity. We recommend Emla® to be used and applied in vaccination when the children are three-, five- and twelve months.

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Use of Complimentary/Alternative therapy for chronic pain



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Aims: To investigate the use of Complimentary/Alternative therapy for chronic pain in nationwide sample.

Methods: In this cross-sectional study a postal questionnaire measuring socio-demographic variables (e.g. gender, education, income and residence), pain characteristics (severity and interference with daily life), health related quality of life and use of Complimentary/Alternative therapy for chronic pain, was sent to a sample of 4500 individuals randomly drawn from the national population of Iceland. The relationships between socio-demographic and pain related variables and pain related use of Complimentary/Alternative therapy among participants reporting chronic pain (≥ 3 months) were tested.

Results: The prevalence of chronic pain (≥ 3 months) among respondents was 47.5%. Among participants reporting chronic pain, 45.5% ($n=343$) reported having consulted some kind of Complimentary or Alternative therapy for their pain the previous six months and this was more prevalent among women than men. Most usual kind of therapists consulted was Acupuncturists (21.4%) and Chiropractors (18.3%). There were some gender differences in what kind of therapy people had consulted. Women were more likely than men to have consulted Acupuncturist while men consulted a Chiropractor more often than women. Logistic regression analysis showed that predictors for use of Complimentary/Alternative therapy for chronic pain were gender, urban residence and pain severity. The use of Complimentary/Alternative

therapy was not related to education, family income or health related quality of life.

Conclusions: Women and urban residents are more likely than men and rural residents to seek Complimentary/Alternative therapy for chronic. People are more likely to seek Complimentary/Alternative care for chronic pain the more severe pain is.

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Effect of conditioned pain modulation on long-term potentiation-like pain amplification in humans



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Aim: The current study aimed to explore the effect of conditioned pain modulation (CPM) on the long-term potentiation (LTP)-like pain amplification induced by peripheral 10 Hz conditioning electrical stimulation (CES).

Methods: Sensory changes and neurogenic inflammatory vascular reactions induced by 10 Hz CES were assessed in twenty subjects in a randomized crossover design involving two experimental days separated by at least one week. The CPM effect was activated by cold pressor test (CPT) (4 °C) which was applied immediately before the 10 Hz CES in the active session and 32 °C water was used in the control session. Perceptual intensity ratings to single electrical stimulation (SES) at the conditioned skin site and to mechanical stimuli (pinprick and light stroking) in the immediate vicinity of the electrode for CES were recorded. Superficial blood flow (SBF), skin temperature (ST), and heat pain threshold (HPT) were also measured. The pain intensities during the CES process were recorded and the short-form McGill Pain Questionnaire (SF-MPQ) was used for assessing the pain experience.

Results: CPT reduced the pain perception increments to pinprick (12.8 g) and light stroking stimuli after 10 Hz CES compared to the control session. Moreover, CPT resulted in lower pain intensity ratings during the CES process but without significant changes in the SF-MPQ scores between the two sessions. The SBF and ST were found to increase after CES and then gradually decline but without differences between the CPT and the control sessions. No CPM effect was found for HPT and pain intensity increments to SES.

Conclusions: The cold pressor test inhibited heterotopic perception amplification to mechanical stimuli after conditioning electrical stimulation. The results indicate that endogenous descending inhibitory systems may affect pain-amplificatory mechanisms.

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