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## Chronic smokers vs. non-smokers QEEG pattern, findings in surface maps and low resolution electromagnetic tomography analysis

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**Introduction:** Smoking behavior is a public health problem. Nicotine and the other cigarettes substances behave like a psychotropic medication in some sense. For the moment, there are not protocols to be followed in order to avoid the effect of nicotine and other substances on the human EEG Analysis.

**Aim:** The aim of this study was to identify the QEEG surface and LORETA pattern in chronic smokers.

**Method:** The EEG of 20 young people (21-32-year-old) was recorded. Thirteen of them were smokers (65%) and 7 (35%) non-smokers. In addition, Fagerström Test was completed by the smokers in order to control the addiction level.

**Results:** Significant differences were found between smokers and non-smokers. In both, surface and LORETA analysis, mainly in Delta, Beta and Alpha bands.

**Discussion:** These findings are congruent with previous literature on this subject and they would be take in mind when clinicians run a basic QEEG study, because tobacco seems to alter the normal EEG.

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