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## Letter to the Editor / Editöre Mektup

## Smoking of Thyme Herb in a Psychotic Patient: A Case Report

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Dear Editor,

We read Sabuncuoglu and Torun's (1) case of cloves use disorder with interest. Some herbal products sold without prescription may have an impact on the central nervous system (2,3). Thyme is a commonly used herb in our country among public as a healing plant. Various application areas such as cramp reliever, disinfectant and expectorant and forms of use as thyme tea, tincture, bath are mentioned (4). Herein, we would like to draw attention to use of thyme in the form of cigarette in a psychotic patient who previously had mixed substance abuse.

A 22 year old, single, male patient, high school drop out, unemployed and living with his parents, was hospitalized due to complaints such as ongoing self-talk, inappropriate laughter, insomnia, loss of appetite and irritability for one week. He had outpatient follow-ups of mixed drug abuse for 7 years and he had psychotic symptoms for 2 years which caused his hospitalization three times with the diagnosis of "atypical psychosis". He had full remission but he does not have long-term regular use of medication. He had history of smoking in the past but no history of alcohol use. He had cannabis use twice a week for 7 years and synthetic cannabinoiduse every other day for one year approximately, also he used ecstacy a few times. He stated that he did not use cannabis for nearly a year and the last time he used synthetic cannabinoid was one week before his hospitalization. The longest period of abstinence was 2 months. He told that "to get rid of cannabis addiction", he collected various herbs, he smoked them in a cigarette paper, among them "he selected thyme" and he claimed that "thyme is better than other herbs to get high". He was smoking thyme every day and many times per day for the last month. During the last month when he was using thyme, he denied the use of other substances except synthetic cannabinoid once per week.

He was hospitalized with the diagnosis of "atypical psychosis" and started on intramuscular (IM) haloperidol 20 mg/day and IM biperidene 10 mg/day. On the  $3^{rd}$  day of his hospitalization, the treatment switched to oral risperidone 6 mg/day, biperidene 4 mg/day and quetiapine 300 mg/day which he benefited previously. On the  $3^{rd}$  day and  $2^{nd}$  week risperidone 50 mg long-acting injections were applied. No special treatment or attitude targeting thyme use

was practiced in clinical follow-up. Electro convulsive therapy (ECT) was planned due to partial response to pharmacotherapy. After 7 ECT sessions psychotic symptoms greatly declined and on the  $6^{th}$  week of his admission, he was discharged in clinical remission with risperidon 4 mg/day, biperidene 4 mg/day, risperidone 50 mg long-acting injection/two weeks and with the diagnosis of atypical psychosis. Admission to outpatient clinic after one week was recommended but it was noticed that he did not applied.

The use of herbs such as St John's Wort, kava kava, valerian, hops and ginseng in treatment of psychiatric disorders is reported in the literature (3). In Turkey, although there are many aromatic plants belonging Lamiaceae familia, especially species including carvacrol and thymol are accepted as thyme (5). Thyme is reported to be used as analgesic, antiseptic, antitussive and spasmolytic (4,6,7). Studies showed that thyme's oils and extracts have antitumor, antimicrobial and antioxidant effects and its use was recommended in algology due to antinociceptive effect (8-10). A positive allosteric modulator effect of thymol on GABA-A receptors was found and it was demonstarated that this effect was through a binding site different than benzodiazepine, barbiturate, pregnanolone and propofol (11). In texts about psychotropic effects of thyme, it was referred as it was used for nightmares and headache and inhaling its vapor was good for melancholy and epilepsy (12). No article about thyme abuse has been found to our knowledge in literature.

In our case, continuous and intensive use of thyme

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is emphasized as well as its use in the form of cigarette which has not been mentioned previously in the literature. Our patient stated that he used thyme in his own words "to get rid of cannabis addiction", but also for the exhilarating and relaxing effects. When considering his diagnosis in psychotic spectrum and comorbid substance abuse, it is controversial that the effects attributed to thyme by the patient were directly related to thyme. But relaxing and withdrawal relieving effects of thyme might be derived from its features described in the literature. Thyme use does not meet the criteria of substance use disorders in our case. No withdrawal symptom was reported by the patient or there was no increase in the amount of thyme used therefore no tolerance criteria were met. Furthermore, thyme use might make a profit therapeutically by decreasing the abuse of other substances with known negative effects.

Although the effects of some plants were investigated as evidence based, our knowledge is limited about the effect mechanisms of the majority (13). Psychoactive effects of many plants are known but a wrong perception might occur as they are safe due to the expression "herbal", potential of abuse may increase because they are easily and legally obtainable and their metabolites are not detectable in urine and blood samples (14). Therefore, use of herbal products should be kept in mind in cases with physical and/or psychiatric symptoms. And we want to remind that in order to provide more information in this area, further research is needed to enlighten the physiological and psychotropic effects of herbal products, withdrawal symptoms and dependence syndromes.

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