

## Oral & Poster Presentations

Basic and Clinical  
**5<sup>th</sup> NEUROSCIENCE  
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**Prominent improvement in signs of paranoid personality disorder following dandelion treatment in acne management setting**  
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**Background:** *Taraxacum officinale* (dandelion), a member of the Asteraceae family, is commonly used as a food. Dandelion leaves and roots have been used for hundreds of years to treat liver, gallbladder, kidney, skin and joint problems. Dandelion's active ingredients are found in both the roots and leaves. The leaves contain bitter *sesquiterpene lactones* such as taraxinic acid and *triterpenoids* such as cycloartenol. The roots contain these compounds as well as phenolic acids and inulin.

**Objective:** We describe a case of paranoid personality disorder that was identified following treatment with *T. officinale* for acne of a man.

**Design:** case study

**Methods:** A 42 year old man with complaint of chronic acne vulgaris on his face, unresponsive to routine treatment, referred to medical school. He was otherwise normal and didn't take any medication. We empirically treated him with an infusion of roots of *Taraxacum officinale*, because of its traditional use in skin disorders and its liver tonic effects. The starting dose was 250 mg/day of root powder as infusion (with a small amount of a herbal polysaccharide as base), oral, twice a day, and when it was tolerated by patient, the dose was increased gradually up to 1 g/day, during one week. Moreover, because of his complaint of heat intolerance; we also designed a diet which consisted of lower proportions of "hot-foods" and higher proportions of "temperate- or cold-foods"; as it was traditionally described by Avicenna (The Canon of Medicine). Based on additional information on his psychological status (see below), we designed a daily questionnaire about his abnormal behaviors and insomnia, which were scored from +1 (mild sign) to +4 (severe sign) according to severity of signs, by a member of his family. The completed form was evaluated as weekly.

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**Results:** After two weeks of treatment, his acne was significantly improved; previous rashes were improved and *T. officinale* helped their resolution to be faster, and development of new rashes was decreased. Unpredictably, his family individually reported that not only his acne was improved but also, his sleep and behavior changed significantly; this added new knowledge to us. He has been often a highly irritable and intolerant of others, anger, violent, and paranoid person; whose negative reactions couldn't subside easily, and sometimes these behaviors are being uncontrollable. Furthermore, he had grandiosity and he isn't interested in social communications, they said about the patient. Consequently, his abnormal behavior put them under an unpleasant condition and a psychological pressure, which profoundly affects their family communications. Nevertheless, when the patient was questioned, he refused to confirm; and he didn't believe going to a psychologist is necessarily needed. Although, according to his family report; frequency and duration of his signs such as violence, grandiosity and paranoia were decreased clearly. Also, his insomnia and social communications were bettered. Fortunately, because of its prominent effects on his acne, the man continued the use of *T. officinale* and following up the diet. Collectively, evaluation of completed questionnaire showed that prominent improvement in psychological status of the patient has continued up to 6 months of following up.

**Discussion:** Although cognitive effects of *T. officinale* has been reported, but its behavioral effects in human have never been reported. It is suggested that *T. officinale* may have behavioral effects in psychological conditions such as paranoid personality disorder, bipolar disorder, paranoid schizophrenia and etc. Though, the associated diet may also be responsible, in part. Nevertheless, elucidation of this finding needs a detailed investigation on effectiveness and safety of the herb in appropriate experimental settings.

**Key words:** *Taraxacum officinale*; behavioral effect; paranoia; acne; human

