

**Objectives:** The objective of this study was to examine the quality of life in patients with chronic hand eczema

**Methods:** Descriptive study collating patients who consulted for CHE, at the Dermatology Department of the CHU Hédi Chaker Sfax, during 3 years (2018-2020). A socio-demographic, clinic, and the Quality of life Questionnaire (DLQI) were administered in this study.

**Results:** Our study included 12 patients (8 men and 4 women). The mean age was  $46.8 \pm 11.6$  years. The patients were in professional activity in 86.8% of the cases. No patient was in early retirement or disability status. The average duration of the disease was 4.5 years (1-9 years). All patients were in remission. The intensity of pruritus at the last attack was mild (25.77%), moderate (72.23%), and severe (2%). The impact of pruritus on sleep was noted in 100%. The mean total quality of life score (DLQI) was  $6.8 \pm 5.5$  which means a moderate impairment of quality of life

**Conclusions:** This work highlights the importance of the impact of this dermatitis on the quality of life of these patients. Therefore, multidisciplinary dermatological and psychiatric management is considered necessary

**Disclosure:** No significant relationships.

**Keywords:** chronic hand eczema; Quality of Life

## Neuroscience in Psychiatry

### EPV1742

#### A Review of Aeruginascin and Potential Entourage Effect in Hallucinogenic Mushrooms

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**Introduction:** The 5-HT<sub>2A</sub> agonist classic psychedelic, psilocybin (O-phosphoryl-4-hydroxy-N,N-dimethyltryptamine) is a tryptophan, indole-based alkaloid present in up to 2% of certain hallucinogenic “magic” mushroom species; typically *Psilocybe azurescens*, *semilanceata*, and *cyanescens*. In addition, mushrooms may contain psilocin (4-hydroxy-N,N-dimethyltryptamine). Both are indolylalkylamines (tryptamines); other naturally occurring tryptamine compounds include norbaeocystin, baecocystin, norpsilocin, and aeruginascin. A putative synergistic contribution of these compounds has been referred to as the “entourage” effect. Aeruginascin (N,N,N-trimethyl-4-phosphoryloxytryptamine) is found naturally in *Inocybe aeruginascens* and *Pholiotina cyanopus* mushroom species and ingestion reportedly invokes elevation in mood without accompanying hallucinogenic effects:

**Objectives:** To review the pharmacology of aeruginascin and putative entourage effect.

**Methods:** The extant literature on aeruginascin was reviewed and discussed.

**Results:** Methylation of aeruginascin results in an active metabolite, 4-hydroxy-N,N,N-trimethyltryptamine (4-HO-TMT) which has been shown to bind at 5-HT<sub>1A</sub>, 5-HT<sub>2A</sub>, and 5-HT<sub>2B</sub> receptors with Inhibition Constants (K<sub>i</sub>) of 4400, 670, and 120 nM respectively;

compared with psilocybin's binding of 567.4, 107.2 and 4.6 nM respectively. Further, 4-HO-TMT does not bind at the 5-HT<sub>3</sub> receptor, and as a quaternary trimethylammonium compound it is less likely to be able to cross the blood-brain-barrier (BBB).

**Conclusions:** There are very limited data with respect to the pharmacology of aeruginascin. Its activity at serotonin receptors is less by several orders of magnitude than psilocybin and it has potentially less brain penetrance. Given that it is found in different mushrooms species the data would suggest that its direct contribution to any entourage effect is limited. Further research is needed into other naturally occurring tryptamine compounds.

**Disclosure:** PC is a member of the Scientific Advisory Board of Zylorion. AA, EB, JC, CE have no disclosures to report.

**Keywords:** ENTOURAGE EFFECT; Psilocybin; Aeruginascin

### EPV1745

#### Protective role of glutathione in oxidative stress caused by cadmium and copper

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**Introduction:** Cadmium is defined as one of the leading toxic industrial pollutants (Valko i sar., 2005). Although some products containing cadmium can be recycled, much of the pollution with this metal is the result of inadequate disposal and uncontrolled incineration of cadmium-containing waste (Jarup, 2003). Copper particles are released into the atmosphere from copper smelters and ore processing facilities, as well as from anthropogenic sources (use of pesticides, herbicides and fungicides). Oxidative stress occurs due to increased production of reactive oxygen species (Parkinson's and Alzheimer's disease) or reduced ability of cells to neutralize it through their internal antioxidants (eg mutation of the superoxide dismutase gene in amyotrophic lateral sclerosis).

**Objectives:** The aim of this research was to examine the protective role of supplement, GSH, S-donor ligand, and in conditions of acute and chronic intoxication with sublethal doses of cadmium-II-chloride and copper II sulfate.

**Methods:** After medial laparotomy albino rates Wistar soy, a 10% homogenate of brain tissue was made in an appropriate medium and an analysis of acid and alkaline DNase activity was performed (Kocić i sar., 2004; Kocić i sar., 1998).

**Results:** This experiment demonstrated the beneficial role of GSH supplement that exhibit antioxidant character in preventing and reducing the adverse effects of acute and chronic cadmium and copper intoxication.

**Conclusions:** Antioxidants prevent the formation of oxidative stress in the cell by reducing and stopping DNA damage and degradation, and thus represent potential scavengers of free radicals.

**Disclosure:** No significant relationships.

**Keywords:** Glutathione; cadmium; copper; oxidative stress