

Dall'associazione AMICA contro l'MCS

Un nuovo studio sulla MCS appena pubblicato che è stato condotto dall'equipe italiana del Prof. Viziano, del Prof. Alessandrini e del Dott. Micarelli dell'Ospedale Sant'Andrea di Roma.

In questa ricerca si sono occupati della **iperacusia nei pazienti con MCS**, uno studio davvero innovativo e importante nel fare luce su questo aspetto della malattia che, a quanto mi è dato sapere, non era mai stato affrontato prima.

In passato solo il Prof. Martin Pall aveva evidenziato che il tinnito (o acufene) poteva avere la stessa causa della MCS ovvero l'attivazione del circolo biochimico NO/ONOO.

Considerando poi che l'attivazione del recettore NMDA può essere associata anche dell'aumento dell'ormone ADH (correlato all'idrope endolinfatico), non si può escludere che il meccanismo NO/ONOO possa essere una causa o concausa anche delle vertigini riportate dai pazienti con MCS soprattutto subito dopo l'esposizione a sostanze chimiche.

Noise sensitivity and hyperacusis in patients affected by multiple chemical sensitivity

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Viziano A 1, Micarelli A 2,3, Alessandrini M 1.

- 1Department of Clinical Sciences and Translational Medicine, 'Tor Vergata' University, Via Montpellier, 1, E sud Tower, 00133, Rome, Italy.
- 2Department of Clinical Sciences and Translational Medicine, 'Tor Vergata' University,

Via Montpellier, 1, E sud Tower, 00133, Rome, Italy. wmailto:alessandromicarelli@yahoo.it.

- 3Department of Systems Medicine - Neuroscience Unit, 'Tor Vergata' University, Rome, Italy. wmailto:alessandromicarelli@yahoo.it.

Abstract

PURPOSE:

The aim of this study was to investigate the presence of noise sensitivity and hyperacusis in patients suffering from multiple chemical sensitivity (MCS), a chronic condition characterized by several symptoms following low-level chemical exposure. Moreover, distortion product otoacoustic emissions (DPOAE) were performed to further study cochlear function.

METHODS:

A questionnaire-based survey was performed. Eighteen MCS patients, selected with strict diagnostic criteria, and 20 healthy age- and gender-matched subjects filled Weinstein's Noise Sensitivity Questionnaire (WNS) and Khalfa's Hyperacusis Questionnaire (HQ). Results were compared with scores from the quick Environmental Exposure Sensitivity Index (qEESI), a routinely used questionnaire to screen MCS symptoms, and with DPOAE values. An analysis of variance (ANOVA) was performed between MCS and control subjects scores; moreover, Spearman's rank correlation test was performed between questionnaire results.

RESULTS:

ANOVA testing on DPOAE values showed any significant difference between groups, while WNS, HQ and qEESI scores were significantly higher in MCS group compared to controls. Correlation analysis showed strong positive correlation between WNS, HQ and qEESI in MCS subjects.

CONCLUSIONS:

For the first time, auditory-related perceptual disorders were studied in MCS. A strong association between WNS, HQ results and MCS symptoms severity has been highlighted. These findings suggest that decreased sound tolerance and noise sensitivity could be considered as possible new aspects of this syndrome, contributing to its peculiar phenotype. Furthermore, as DPOAE values did not differ from healthy subjects, present findings might suggest a 'central' source for such disorders in this group of patients.

KEYWORDS:

Distortion product otoacoustic emissions; Hyperacusis; Idiopathic environmental intolerance; Multiple chemical sensitivity; Noise sensitivity

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