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is confounded by state-dependent passivity, as might be expected in the depressed state. In other words, if the animal remains passive in a passive avoidance task, we do not know whether the prolonged latency to response is due to depression-associated passivity or to better recall of a noxious stimulus.

Thus, in passive avoidance tasks, passivity of the animal on account of depression related behaviour can falsely inflate task performance scores, and hence be misinterpreted as better recall. It is currently considered that in research involving learning and memory, such potential biases should be identified and eliminated at the level of the study design itself (Andrade et al., 2000). I therefore suggest that authors' point might have been more validly made had they used an active avoidance task to demonstrate that inescapable shocks improve the recall of noxious stimuli.

Finally: a healthy rat in a controlled environment is far removed from a dysfunctional human in a complex psychosocial milieu; therefore, generalization from laboratory to clinic should be made with caution, and only after artefactual influences have been eliminated through appropriate experimental designs (Andrade, 1995, Andrade et al., 2000).

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INTOLERANCE TO NOISE IN PSYCHIATRIC DISORDERS

Sir,

A substantial proportion of patients with anxiety or depression complain that they are unable to tolerate noise, and that sounds seem disproportionately loud. I have not come across any explanation for this phenomenon in my readings, and therefore wish to suggest an appealing mechanism.

In normal persons exposed to loud noise, the tensor tympani and the stapedius muscles reflexly coordinate to dampen vibrations of the eardrum and the transmission of auditory impulses into the inner ear. In fatigued individuals, particularly those who are mentally fatigued, muscles react more slowly and with less efficiency. Fatigue is a recognized DSM-IV criterion for the diagnosis of conditions such as dysthymia, generalized anxiety disorder, and major depression. Ergo, sluggish or inefficient muscular dampening of auditory transmission might explain why some psychiatric patients are intolerant of noise, or find that sounds appear uncomfortably loud.

There is also the consideration that the experience of loudness of sound may be a magnified psychological response to an environmental irritant. Yet another possibility is that a dysfunctional mood state may result in a magnified cortical response to stimuli of normal intensity. I wonder which one (or more) of these mechanisms are involved.

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EAR DISEASE AND MANIA - A PRELIMINARY STUDY

Sir,

Ear diseases have been reported to have
a high prevalence among insanes for quite some
time (Robinson, 1927). However, there have
been few attempts to study ear diseases in
specific psychiatric disorders (Cooper, 1974)
or specific ear disorders as risk factors for
psychiatric morbidity (Mason, 1995).

We studied all consecutive patients
attending Central Institute of Psychiatry, India
for the first time and being admitted with a
diagnosis of bipolar affective disorder current
episode mania using the diagnostic criteria laid
down in the diagnostic and statistical manual for
mental disorders, fourth edition.

After taking informed consent, the patients
underwent an otological examination by one of
the researchers (MKS). A diagnosis of chronic
adhesive otitis media was clinically made on the
finding of a grossly retracted immobile tympanic
membrane showing adhesive changes. A
diagnosis of chronic suppurative otitis media
made with a finding of mucopurulent or purulent
ear discharge with signs of chronic inflammation
in middle ear cleft (Chole, 1993). Matched
nonpsychiatric controls were taken from the first
degree relatives of diagnosed bipolar patients
attending the out patient services.

The sample included thirty five patients
and controls each consisting of twenty nine
males and six females. Chronic otitis media was
present in fourteen patients and five controls
\( (X^2=5.88, \text{ d.f.}=1, p<0.002) \). The subtyping
revealed nine patients with chronic adhesive
otitis media and five with chronic suppurative
otitis media. The disease was bilateral in seven
cases, unilateral right side in six and unilateral
left side in one.

The findings thus reveal a greater
prevalence of middle ear disease in mania and
raise a number of questions. Does middle ear
disease dispose a person to develop mania later
in life? Or is it that patients with mania are more
likely to sustain middle ear diseases due to their
recklessness and physical restlessness? Is it just
a coincidental finding or are ear diseases and
mania different manifestations of some
underlying common biological diathesis?

Despite the inherent limitations of a small
sample size and a failure to perform audiometry
to assess deafness, the finding of a significantly
larger number of manics with an ear disease
raises questions which merit further well planned
studies to elucidate the relationship.

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