

# Meditation-Induced Psychosis

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## Key Words

Meditation-induced psychosis · Acute and transient psychotic disorder · Qi-gong, psychosis

## Abstract

**Background:** Meditation is a self-regulatory psychological strategy that is frequently applied in Western as well as non-Western countries for different purposes; little is known about adverse events. **Sampling and Methods:** A male patient is described who developed an acute and transient psychosis with polymorphic symptomatology after meditating. A literature search for psychotic states related to meditation was carried out on PubMed, Embase and PsycInfo. **Results:** In the case presented a diagnosis of acute polymorphic psychotic disorder was made. Other case reports dealt with either a relapse of a pre-existent psychotic disorder or with a brief psychotic reaction in patients without a psychiatric history. **Conclusion:** Meditation can act as a stressor in vulnerable patients who may develop a transient psychosis with polymorphic symptomatology. The syndrome is not culture bound but sometimes classified in culture-bound taxonomies like Qi-gong Psychotic Reaction.

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## Introduction

Meditation is a method of focussing the mind and is often practised with a specific routine. Although this practice is usually associated with Eastern religions, it is also rather common in Western cultures. Meditation can best be described with the term ‘trance’, or a transcendence of conscious awareness. The main characteristics of trance are a partial detachment from immediate sensory experience and an increased susceptibility to suggestion [1]. Meditation is frequently applied as a self-regulation approach to stress reduction and emotion management [2, 3]. As reviewed by West [4] and Epstein and Lieff [5], meditation may induce serious psychological side effects, including depersonalization, derealization and psychotic symptoms like hallucinations as well as mood disturbances. A culture-bound syndrome induced by Chinese meditation, called Qi-gong [6], is included in DSM-IV as Qi-gong Psychotic Reaction and describes an acute, time-limited episode characterized by dissociation, paranoid, or other psychotic or non-psychotic symptoms [7]. The symptomatology of a meditation-related psychosis as described by Chan-Ob and Boonyanaruthee [8], appears to show similarities with that of the so called ‘zykloide Psychosen’ or ‘bouffées délirantes’, of which the characteristics include among others confusion, pan-anxiety, mood swings and mood dystonic psychotic symptoms as well as an acute onset with a short duration and

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a complete remission. This type of psychosis is included in the ICD-10 as acute polymorphic psychotic disorder [9]. It is well known that such transient functional psychoses with symptoms of schizophrenia have a much higher prevalence in non-Western cultures, which may be explained by differences in cultural beliefs, sociability and management of mental disorders [10, 11].

In the present case report a male patient is described who developed an acute and short-lived psychosis during meditation.

### Case Report

A 24-year-old Caucasian male artist was referred because of an acute sensation of being mentally split during a Hindustan-type meditation. It was an unguided and intense session. The patient had recently trained extensively for a marathon, which resulted in a weight loss of 7 kg. In addition he was experiencing relationship problems and work-related stress. There was no fasting or sleep deprivation. His history mentioned one hypomanic and a couple of mild depressive episodes for which he was never treated. There was no drug abuse or epilepsy. The family history revealed no neuropsychiatric disorders.

Psychiatric examination showed short-lasting visual dysperceptions and hallucinations, ideas of reference and delusional convictions that he had caused the end of the world. The patient experienced various bright colours. These phenomena were accompanied by pananxiety and feelings of guilt. Physical examination and laboratory investigations showed no abnormalities. Neuropsychological testing disclosed no cognitive deficits. His personality profile, as assessed with the MMPI-2 and NEO five-factor inventory, showed a vulnerable personality structure with poor insight in emotional functioning and a depressive, anxious disposition. Treatment with haloperidol (5 mg daily; plasma concentration: 1.9 µg/l) resulted in a disappearance of the psychotic symptoms within one week. Haloperidol was gradually tapered off over three months and subsequently stopped. One month later he developed a relapse of psychosis with paranoid and negativistic delusional thoughts, intense anxieties, mood swings and suicidal ideation. Risperidone 2 mg daily was started to which valproic acid (1,000 mg daily; plasma concentration: 65 mg/l) was added because of his mood instability. This treatment regimen led to a rapid and complete recovery from psychotic symptoms and a gradual normalization of mood that persisted at follow-up after six months.

### Discussion

This case deals with a young man who developed a relapsing acute psychosis with polymorphic symptomatology, precipitated by intense and unguided meditation. Additional stressful factors may have been physical exhaustion as well as work and relationship problems.

Over the past decades several case reports with short-lasting acute psychotic states associated with meditation have been reported (summarized in table 1). As can be inferred, almost all psychotic episodes had a short duration and were characterized by a mixture of psychotic and affective symptoms. About half of the patients had a psychiatric history, especially with psychotic symptoms. According to the clinical descriptions of ICD-10, most patients were suffering from an Acute and Transient Psychotic Disorder. In the DSM-IV they would have met the criteria for a Brief Psychotic Disorder. This type of psychosis with its several subtypes is well known in the German and French psychiatric tradition and has been recently reviewed by van der Heijden et al. [24] and classified in the ICD-10 among the acute polymorphic psychotic disorders with or without schizophrenia (F23.0 and F23.1). Although antipsychotics were administered in almost all case reports and in the present case, it is still unclear whether this treatment is useful or not.

With respect to possible vulnerability factors, there seems to be an increased risk for meditation-related occurrence of psychotic symptoms in individuals with a history of psychiatric symptoms or with a certain personality structure, and in cases of sleep deprivation or physical exhaustion [5]. In the case reports presented in table 1, states of physical exhaustion were caused by fasting and sleep reduction during long-lasting, unguided and intense meditation, also described as malpractice of meditation [8]. As underlined by Ng [6] in his review about Qi-gong-induced mental disorders, psychotic deterioration is the result of meditation that acts as a stressor in vulnerable individuals. In Qi-gong cases, all Chinese authors describe a polysymptomatic psychiatric syndrome that corresponds to the Western categorical tradition so that the adoption of a separate class of culture-bound syndromes may not be appropriate. Therefore Lee [25] stresses that the Chinese classification system that includes the Qi-gong psychosis tries to conform with international classifications on the one hand and to sustain a nosology with Chinese cultural characteristics on the other. Meditation-induced psychotic states do not represent a separate clinical entity but are the result of a culture-bound nosology.

In conclusion, meditation may act as a stressor in vulnerable subjects and may result in a rather specific psychotic syndrome: acute and transient psychotic disorder that most probably is self-limiting and therefore does not always require antipsychotic treatment.

**Table 1.** Case reports

Author	Sex	Age	Psychiatric history	Duration	Treatment	Established diagnosis	Fasting	Sleep reduction
French et al. 1975 [12]	f	38	no	5 months	no	psychosis-like episode	n.k.	yes
Walsh and Roche 1979 [13]	m	25	acute schizophrenic episodes	2 days	thioridazine 150 mg	not described	yes	yes
	f	23	acute schizophrenic episodes	4 days	thioridazine	acute schizophrenic episode	yes	yes
	f	23	schizophrenia	suicide attempt, no follow-up	chlorpromazine	acute schizophrenic episode	n.k.	n.k.
Hanssen 1981 [14]	f	33	character neurosis	18 days	chlorprotixene	acute reactive paranoid psychosis	n.k.	n.k.
	m	24	no	1 week	chlorpenthixol	excited reactive psychosis	n.k.	yes
	m	24	poor social interaction	5 months oscillating state	perfenazine	acute reactive paranoid psychosis	n.k.	n.k.
Trujillo et al. 1992 [15]	m	20	schizoid personality disorder	few days	neuroleptics	schizophreniform psychosis	n.k.	n.k.
	m	27	schizoid personality disorder	few days	neuroleptics	schizophreniform psychosis	n.k.	n.k.
Xu 1994 [16]	m	22	no	6 weeks	ECT	n.k.	n.k.	n.k.
	m	44	a short psychotic episode (after meditation)	1 week	chlorpromazine 200 mg	schizophrenic character	n.k.	n.k.
Lim and Lin 1996 [17]	m	57	no	2 months, residual psychotic symptoms, no follow-up	haloperidol 4 mg	schizophreniform disorder versus schizophrenia, paranoid type	no	no
Chan-Ob and Boonyanarythee 1999 [8]	f	25	depression	1 week	haloperidol	brief psychotic disorder	yes	yes
	m	35	n.k.	1 week	haloperidol 15 mg	bipolar disorder type I	lost appetite	yes
	f	28	schizophreniform disorder	7 days	trifluoperazine 15 mg	schizophrenia	n.k.	n.k.
Shan 2000 [18]	m	44	schizophreniform disorder (after qi-gong practice)	1 week	chlorpromazine 200 mg	schizophrenic character	n.k.	n.k.
Yorston, 2001 [19]	f	25	no	8 weeks	haloperidol 10 mg	bipolar affective disorder	n.k.	yes
Sethi and Bhargava, 2003 [20]	m	20	no	1 month	olanzapine	schizophrenia	yes	yes
	m	30	two psychotic episodes (after meditation)	n.k.	risperidone	schizophrenia	n.k.	yes

n.k. = Not known.

Following cases could not be studied because of Asian languages: Disayavanish and Disayvanish, 1984 [21] (study of 8 cases, in Thai); Wang, 1994 [22] (in Chinese); Wu, 1992 [23] (study of 76 cases in Chinese).

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