Letters

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Schizophrenic psychosis associated with benzhexol (artane) therapy

Sir: We wish to report the first case of a schizophrenic illness associated with the 
thecapeutical use of high dose benzhexol.

The patient, a 30 year old female, was diagnosed with spasmodic torticollis at the 
age of 17. For several years she was treated with various agents, including amantadine, 
clonazepam, trifluoperazine, haloperidol and baclofen, but without success. At the age of 
23 she was admitted to a psychiatric hospital, with an obsessive-compulsive dis- 
order (OCD), which persisted for several years. This was originally associated with 
depression and dysmorphic beliefs concerning her appearance, but only the OCD 
persisted. She was again admitted at the age of 26 with depression associated with 
dysmorphic concerns.

Three years later she was referred to a specialist neurology clinic for a second opin- 
ion concerning her movement disorder. Spasmodic torticollis was again diagnosed, 
and benzhexol therapy started. Over a three month period the dose was increased to 45 
mg daily, and there was a complete resolution of the torticollis.

Four months after starting the benzhexol, she developed a paranoid psychosis, 
associated with delusions of persecution, delusions of reference and delusions of hav- 
ing AIDS, in addition to her previous dys- 
morphic fears. She was admitted to a psychiatric hospital, where she was irritable 
and abusive but there was no evidence of a confusional state. She was treated with 
chlorpromazine and her benzhexol therapy was reduced to 15 mg daily.

Over the next two months her condition deteriorated. She developed thought broad- 
casting and third person auditory halluci- 

nations, including voices instructing her on 
her behaviour. She became convinced that 
the hospital was a concentration camp, and 
that her husband had been turned into a Nazi 
officer who had murdered her family. She 
was also convinced that the members of her 
family who visited her in hospital were 
impostors. She accused the nurses of pouring 
alcohol down her throat. There were also 
features suggestive of a mood disorder, with 
irritability, aggression and elation. At no 
stage was there any alteration in conscious-

She was treated with increased doses of chlorpromazine, thioridazine and lithium, 
and made a gradual recovery, leaving the hospital after 4 months. When she was seen 
in outpatients, still taking benzhexol 15 mg, she was improving. However, six months 
later confusion over dosages resulted in the prescription of benzhexol being increased to 
15 mg tds. Within one month she had deteriorated. The principal complaint was of 
thought broadcasting, but Capgras’s syn- 
drome was again present. All treatment was 
stopped, but there was no change in her 
condition over the eight week period before 
neuroleptic therapy was again instituted. 
She still complains of thought broadcasting six months after stopping benzhexol. Her 
torticollis has not returned. There is no family 
history of neurological or psychiatric illness, 
and there is no history of alcohol or illicit 
drug abuse.

Benzhexol toxicity is well known. The 
principal features are those of a toxic con- 
fusional state, in which visual hallucinations 
and disorientation of time and memory are 
pronounced. As benzhexol has euphoriant 
properties it is a frequent drug of abuse, and 
it is in this context that most psychiatric side- 
effects are reported. A recent series included 
three cases in which a brief psychosis 
occurred after overdosage of between 25 mg 
and 50 mg. It is not clear, however, if this was 
associated with clouding of consciousness. 
There are fewer reports of psychiatric side 
effects occurring after the therapeutic use of 
benzhexol, although an early case is of 
particular interest. Bolin described a 32 year old female who was prescribed a regular dose of 30 mg benzhexol for spasmodic torticollis (with therapeutic benefit), who developed a 
toxic confusional state. Rechallenge with a 
lower dose (8 mg) led to a reappearance of 
irritability and ill-defined ideas of reference.

In our current case there is little doubt about the diagnosis of a schizophrenic psy- 
chosis, made by the persistence of several 
first rank symptoms without a disorder of 
consciousness. The important question is 
whether this was precipitated by benzhexol. 
It is possible that the psychosis was unrelated 
to therapy, since dysmorphicphobia may 
precede schizophrenia. However, the prin- 
cipal psychiatric disorder before either the 
development of a psychosis or the introduc- 
tion of benzhexol, was that of an obsessive- 
compulsive disorder (OCD). Marks concluded 
that there is no association between 
OCD and schizophrenia, although there may 
be an association with basal ganglia dis- 
orders.

There are substantial grounds for suggest- 
ing a link between the psychosis and benz- 
hexol therapy. After 12 years of torticollis 
and six years of OCD, the psychosis developed within three months of starting 
high-dose benzhexol therapy. When a high 
dose therapy was inadvertently restarted her 
psychosis returned. Although the develop- 
ment of first-rank symptoms has not been 
recorded previously, other features of her 
illness, in particular the development of 
elation, are in keeping with previous reports of psychosis resulting from benzhexol 
therapy. It is unlikely that benzhexol is the 
sole cause of the psychosis, instead it may 
have precipitated a schizophrenic episode in 
a predisposed patient.

High dose anticholinergic therapy is being 
increasingly used in the treatment of several 
movement disorders. Clinicians should be 
aware of the possibility of a schizophrenic 
ilness.

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