

## CASE REPORT

# Tiapride for pathological jealousy (Othello syndrome) in elderly patients

Taijiro MUKAI

Department of Neuropsychiatry, Kinki University School of Medicine, Osaka, Japan

*Correspondence:* Dr T. Mukai MD, PhD, Kinki University School of Medicine, Department of Neuropsychiatry, 377-1 Ohno-Higashi, Osaka-Sayama, Osaka 589-8511, Japan. Email: mukai-tj@med.kindai.ac.jp

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## Abstract

Pathological jealousy can be seen in all generations. It is known to be difficult to treat, especially in older patients. In middle-aged patients, it is commonly treated with neuroleptics like pimozide but in elder patients treatment options are limited because of the adverse side-effects of neuroleptics, such as extrapyramidal syndrome. The present study documents the successful treatment of a 98-year-old Japanese man who showed pathological jealousy using tiapride without any adverse side-effects. Concluding that tiapride might be considered the medicine of choice in all kinds of monodelusional disorders among the elderly.

## INTRODUCTION

Pathological jealousy is related to various psychiatric diseases.<sup>1,2</sup> This delusional disorder can present in various age groups as well as in the elderly. The basis of delusion in pathological jealousy is limited to the unfaithfulness of a spouse, other pathological symptoms are not displayed. Under their delusion, pathological jealousy patients have a tendency to display violence toward their spouses and in some cases they might commit criminal acts, etc. The delusion often causes serious results.<sup>3,4</sup> Various treatments have been tried to treat pathological jealousy. Pimozide is said to be effective for pathological jealousy in middle-aged patients.<sup>4-6</sup> However, this treatment is limited in elderly patients because of the adverse side-effects caused by pimozide.<sup>7</sup>

The present study describes the dramatic treatment effects using tiapride on an elderly patient with the symptoms of pathological jealousy. It also discusses possibilities of the effective treatment of other monodelusional disorders.

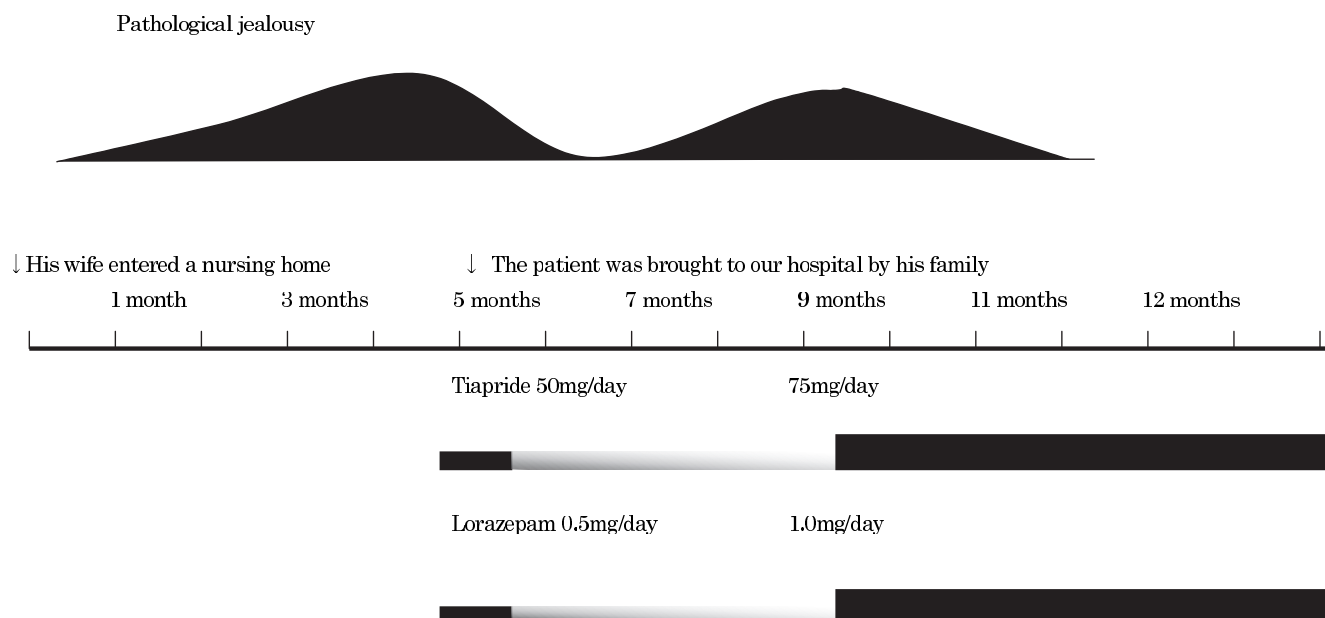
To the best of the author's knowledge, this is the first case report of its kind, which discusses the treatment effects of tiapride on a patient with pathological jealousy.

## CASE REPORT

A 98-year-old Japanese man who did not have a psychiatric history, a history of alcoholism, or a family history of psychiatric illness is the subject of the present study. His premorbid character was 'stubborn'. His family said that he became increasingly more stubborn as he aged. Figure 1 shows the course of the patient's illness.

The patient was brought to our hospital by his family as an outpatient. Several months prior to presentation, the dementia symptoms of his 89-year-old wife advanced and she entered a nursing home. He took his wife back home, because she committed unfaithful acts with another male in the nursing home. He had difficulty caring for his wife at home so his daughter and her husband tried to help him by took care of his wife. The patient, however, believed that his daughter's husband and his wife were being unfaithful. Therefore, he was irritated and anxious, and he got angry with his family. He did not sleep, even during the night.

He was prescribed 50 mg/day of tiapride for pathological jealousy and 0.5 mg/day of lorazepam for sleep disturbance. One week later, his irritability became less severe compared to before the treatment



**Figure 1** Course of the patient's illness.

and he no longer got angry with his family. However, the patient did not regularly take the medication for his pathological jealousy because of this his pathological jealousy became worse once again and his irritation got worse simultaneously.

Such conditions continued for several months. Three months later, his daughter started to control his medication and he began to regularly take 75 mg/day of tiapride and 1.0 mg/day of lorazepam before sleep. After this, the patient permitted his wife to re-enter the nursing home and stopped mentioning his suspicions of his wife's faithfulness. He no longer showed signs of irritation. Regarding his treatment, the patient did not manifest any adverse side-effects from the tiapride and all his treatment was carried out as an outpatient.

Brain computed tomography findings revealed brain atrophy with multiple cerebral infarctions. Laboratory data did not indicate any particular findings. He scored 14/30 on the Hasegawa dementia scale, which is categorized as slight dementia.

## DISCUSSION

The symptoms of this patient were diagnosed as those typical of pathological jealousy, also known as Othello Syndrome. Over several months, he doubted the faithfulness of his wife but did not have any clear evidence.

Mooney details various psychiatric diseases related to pathological jealousy and the relationship between alcoholism or drug dependence and pathological jealousy.<sup>1</sup> However, in this case the patient did not have any history of either drug or alcohol abuse. Pathological jealousy is also seen in schizophrenics but this patient does not fit the criteria for schizophrenia because his delusion was limited to jealousy and there were no other pathological symptoms. The patient meets the DSM IV criteria for a diagnosis of delusional disorder, jealous subtype (code 297.1 jealous subtype).<sup>8</sup>

Munro<sup>4</sup> reported the excellent effect of pimozide for morbid jealousy. Byrne and Yatham,<sup>5</sup> and Iruela *et al.*<sup>6</sup> have reported the same results. Most of these reports describe cases of middle-aged patients, 30–50 years. Byrne and Yatham (1989) reported the effectiveness of pimozide for monodelusional disorders of all kinds, including pathological jealousy.<sup>5</sup> Recently it has been reported that fluoxetine, a kind of selective serotonin re-uptake inhibitor (SSRI), is effective in treating pathological jealousy.<sup>9</sup> Although this report is about the case of a 34 year-old.

In the present study, the case of pathological jealousy was of advanced age at 98 years. Neuroleptics such as pimozide should be prescribed with very careful attention in cases of elderly patients because

they can cause adverse side-effects such as extrapyramidal symptoms.

Pimozide is a diphenylbutylpiperidine derivative, which is a potent highly selective dopamine receptor D2 antagonist with long half-life. Pimozide might cause cardiac arrhythmias at higher doses.<sup>7</sup>

Tiapride has a chemical structure and binding specificity to dopamine receptors similar to sulpiride, a kind of benzamide derivative. Tiapride has strong selectivity to only D2 receptors among dopamine receptors. It is a low potency, highly selective, D2 antagonist but relative free of extrapyramidal symptoms.<sup>10-13</sup>

Tiapride is effective in treating the abnormal actions and emotional disturbances of elderly patients suffering from cerebrovascular disease.<sup>13</sup>

One of the primary advantages of tiapride is that it has fewer adverse effects than other neuroleptics, even in aged patients. In the present case, adverse side-effects were not seen at all.

As the author has already discussed, tiapride has an excellent effect on delusion of dermatozoosis in elderly patients.<sup>14,15</sup> It is a kind of monodelusional disorder also often seen in elderly people. Maeda *et al.* has also reported the same effect of tiapride on delusion of dermatozoosis.<sup>16</sup> The use of tiapride for the treatment of delusion of dermatozoosis is common in Japan.

In conclusion the present report suggests that tiapride might be considered the medicine of choice in pathological jealousy of aged patients and all monodelusional disorders suffered by elderly people.

## REFERENCES

- 1 Mooney HB. Pathologic jealousy and psychochemotherapy. *Brit J Psychiatry* 1965; **111**: 1023-1042.
- 2 McNamara P, Durso R. Reversible pathologic jealousy (Othello Syndrome) associated with amantadine. *J Geriatr Psychiatry Neurol* 1991; **4**: 157-159.
- 3 Silva JA, Derecho DV, Leong GB, Ferrari MM. Stalking behavior in delusional jealousy. *J Forensic Sci* 2000; **45**: 77-82.
- 4 Munro A. Excellent response of pathologic jealousy to pimozide. *Can Med Assoc J* 1983; **131**: 852-853.
- 5 Byrne A, Yatham 1. Pimozide in pathological jealousy. *Br J Psychiatry* 1989; **155**: 249-251.
- 6 Iruela LM, Gilaberte I, Caballero L, Oliveros SC. Pathological jealousy and pimozide. *Br J Psychiatry* 1990; **156**: 749.
- 7 Andearson I, Mortimore C. Psychopharmacology. In: Appleby L, Froshaw DM, Amos T and Barker H (eds) *Postgraduate Psychiatry*, pp. 60-80. London: Clinical and Scientific Foundation; 2001.
- 8 American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Forth Edition (DSM IV)*. Washington DC: American Psychiatric Association, 1995.
- 9 Gross MD. Treatment of pathological jealousy by fluoxetine. *Am J Psychiatry* 1991; **148**: 683-684.
- 10 Arita T, Samura N, Nomura Y. Comparison of effects tiapride and sulpiride on D1,D2,D3 and D4 subtypes of dopamine receptors in rat strial and bovine caudate nucleus membranes. *Jpn J Pharmacol* 1986; **41**: 419-423.
- 11 Bondarenko NA, Gorantcheva J, Tyutyulkova N, Nikolova M, Valdman AV. Effect of some benzamide derives on stress-induced behavior and striatum dopamine receptors. *Methods Find Exp Clin Pharmacol* 1988; **10**: 629-633.
- 12 Costall B, Naylaor RJ. The substituted benzamide. selective dopamine receptor blockade. In: Ackenheil M, Matussek N (eds) *Special Aspects of Psychopharmacology* pp. 41-48. Bradford: Expansion Scientifique Fravcais, 1983.
- 13 Satou H, Ono R, Matuo S. The development and the effect of tiapride. *Sinryou to sinyaku* 1988; **24**: 19-27 (in Japanese).
- 14 Mukai T, Hitomi K. A case of delusion of dermatozoosis focusing on drug therapy. *Jpn J Gen Hosp Psychiatry* 1998; **10**: 137-142 (in Japanese with English abstract).
- 15 Mukai T, Hitomi K. A case of delusion of dermatozoosis dramatically effected by tiapride. *Seishin Igaku (Clin Psychiatry)* 1993; **35**: 773-776 (in Japanese).
- 16 Maeda K, Yamasita H, Kakiki T *et al.* Improvement with tiapride of delusion of dermatozoosis. *Seishin Igaku (Clinical Psychiatry)* 1994; **36**: 1099-1101 (in Japanese).