

Aripiprazole worsening positive symptoms and memantine reducing negative symptoms in a patient with paranoid schizophrenia

Aripiprazol piorando os sintomas positivos e memantina reduzindo os sintomas negativos em um paciente com esquizofrenia paranóide

Case report

A 72-year old patient, diagnosed as paranoid schizophrenic according to DSM-IV, first became ill at 30 years. In August 2003, she was living in an institution. Her speech was disorganized and poor, and its content was non-systematic and paranoid. She took no part in activities and waited passively for family visits. During this period she was in use of haloperidol 1 mg, promethazine 25 mg, estazolam 2 mg and clonazepam 2 mg (only when aggressive). In August 2003, aripiprazole was introduced, initially at a dose of 7.5 mg/day, which was increased to 15 mg/day one month later. The other medications were stopped except for estazolam. In October 2003, she appeared happier, more active and communicative. In January 2004, she had a psychotic outbreak with paranoid delusion and aggression. On this occasion, trifluoperazine was introduced at a dose of 7.5 mg/day, and aripiprazole was maintained at 15 mg/day. In April 2004, the patient's positive symptoms had improved, and in May trifluoperazine was stopped and aripiprazole 15 mg was maintained. Two weeks later the positive symptoms, paranoid delusion and aggression, returned and trifluoperazine was reinitiated at 7.5 mg/day. Aripiprazole was reduced to 7.5 mg/day, while trifluoperazine was maintained at 7.5 mg/day until August 2004. The patient became apathetic, and trifluoperazine was then stopped in January 2005. In March 2005, the patient was receiving 7.5 mg of aripiprazole, she had no prominent paranoid symptomatology; however, her speech was disorganized and poor, she had a significant reduction in memory fixation, spoke very slowly and stiltedly. In June 2005, memantine (10 mg/day) was added. In the following six months, the patient underwent an improvement in mood, requested to participate in social activities, became more communicative, and had a significant improvement in verbal fluency. In January 2006, memantine was stopped and after two months the patient became apathetic, her verbal fluency deteriorated again, she spoke stiltedly, was non-participative and made no requests. In March 2006, memantine was reintroduced at 10 mg/day and the patient became livelier again. She once again requested relatives to allow her to take part in gymnastics and to go out more. Three other clinical cases have been reported on the improvement in negative symptoms following the association of memantine in female patients who had been

diagnosed with schizophrenia and who were in use of second-generation antipsychotics.¹ In the case presented here, higher doses of aripiprazole appeared to exacerbate positive symptoms in a chronic schizophrenic patient. The combination of aripiprazole with a first-generation antipsychotic and a later reduction in the dose of aripiprazole led to an improvement in positive symptomatology.² According to the IQ-PANSS clinical ratings, an improvement in negative symptoms occurred in the patient following initiation of aripiprazole (-5), and another improvement after memantine therapy (-16) (Table 1).

Since the patient was elderly, the Mini Mental State Examination was also used for her evaluation during the use of memantine and following discontinuation of the drug. No significant change was registered in this scale; therefore, the possible effect of memantine on the symptoms of dementia does not seem to be the most important aspect of this case. Although it was not feasible to assess the possible effects of memantine on preclinical dementia symptoms, this case suggests that memantine, as a result of its antagonistic effect on NMDA receptors, may have improved mood, social integration and verbal fluency in a patient with negative schizophrenic symptoms in treatment with second-generation antipsychotics.

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References

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Table 1 - Progress of the patient as evaluated by the IQ-PANSS clinical ratings and Mini Mental State Examination

	Prior to aripiprazole	Aripiprazole 15 mg	Psychotic outbreak Aripiprazole and trifluoperazine	Aripiprazole 7.5 mg	Aripiprazole and memantine	Memantine stopped	Memantine restarted
IQ-PANSS – total	40	35	46	35	24	36	24
IQ-PANSS – Negative symptoms	11	7	7	7	2	8	2
MMS						23	25