

## Paliperidone ER — meaningful evolution toward enhancing clinical outcomes in patients with schizophrenia

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Paliperidone ER is a major active metabolite of risperidone; it is thus often considered that these two compounds are therapeutically interchangeable. Recent evidence however, indicates that paliperidone extended-release (ER) may be a suitable alternative for patients who have failed risperidone therapy.

A recent post-hoc analysis of data pooled from three 6-week, double-blind, placebo-controlled trials assessed the effects of paliperidone ER in patients with acute symptoms who had previously received risperidone. Interestingly, paliperidone ER was found to be significantly more effective than placebo in reducing symptoms and producing functional gains in these patients.

### Treatment setting:

- Public outpatient clinic

### Personal History

Jian L is a 21-year-old Chinese male, with a 2-year history of delusions. He has no past history of mental illness or drug and alcohol abuse and has never been hospitalized in any mental hospital. He lives with his parents and is currently unemployed. His parents help supervise him and ensure his compliance to medication; they however are unable to attend to him during the day as they are working. During the day he attends a hospital for around six hours to engage in daily structured activities and social interactions. A notable family history is that of his sister suffering from a similar illness and being treated for the same.

### Psychiatric History

Jian began to suffer from delusions 2 years back, primarily related to strangers on the street and the

mass media. He believed that some of the TV series or the programmes on the radio were talking about him and on a few occasions had felt that he was being followed in the street by strangers. His parents reported that he had exhibited abnormal or unsound behaviour, mainly excessive irritability, throwing of objects out of the window, violent confrontation with people for no reason and episodes of chaotic thinking. He refused to go outdoors, this had resulted in him taking a prolonged leave of absence from his work and ultimately led to him being unemployed.

In addition, Jian demonstrated some obsessive compulsive features. He reported repeated unjustified hand washing up to 20 times per day and was very obsessive about cleanliness. He had checking rituals, predominantly checking the car lock before leaving the car and electric switches at home before going to bed. At his job as an accounting clerk, he regularly performed calculations. Jian believed his calculations were wrong and he persisted in checking his work repeatedly. As a result there were delays in work submission and consequently poor appraisals from his boss.

### Examination

On mental state examination Jian was found to exhibit symptoms of delusion and compulsive behavior as detailed above. Physical examination revealed no abnormalities. His waist circumference was normal and his BMI was 30. His blood pressure was measured to be 120/80 mmHg. Comprehensive blood tests including renal function tests, liver function tests and fasting blood sugar were all found to be within normal limits.

### Diagnosis

Schizophrenia with additional obsessive, compulsive features.

### Past Treatment

Jian was initially treated with risperidone, with the dosage being increased up to 8 mg. Nevertheless, he continued to report residual delusion symptoms of being followed in the streets and being referred to by the media that disturbed him considerably. When risperidone dosage was further increased, Jian reported side effects, mainly resting tremor and some limb rigidity that impacted his dexterity to such an extent that he was unable to hold a pair of chopsticks steadily.

### Current Treatment

Jian was switched to paliperidone ER therapy, in view of the residual symptoms experienced by him while on risperidone and the side effects associated with the use of increased dosage of risperidone. The cross titration method was used while switching him from risperidone to paliperidone ER, which involved initiating with 3 mg paliperidone ER and stepping up to 6 mg within one week. In addition, Jian was prescribed a new sleep medication—zolpidem—which he was advised to use only when he was unable to fall asleep. Jian was concurrently counselled and educated about his medications and his illness and was referred to a day hospital for additional support.

#### Reasons for changing risperidone:

- Residual symptoms
- Side effects (tremor, rigidity) with increased dosage

### Outcome

Jian has been receiving paliperidone ER for 8 to 9 weeks now. On switching to paliperidone ER he experienced rapid improvements in residual symptoms with benefits evident within two weeks of initiating therapy. At the last visit, Jian was found to be totally free from his earlier symptoms. He was in full remission with no complaints of any side effects. There was no change in his body weight and monitoring of metabolic indicators revealed no abnormality in any parameters.

#### Jian benefited after switching from risperidone to paliperidone ER:

- Rapid efficacy with no residual delusional and obsessive-compulsive symptoms
- No side effects
- No metabolic abnormalities

### Key Points

- Paliperidone ER, a risperidone metabolite has been demonstrated to have improved efficacy as compared to risperidone in certain patients. It thus offers a suitable treatment options for patients who do not respond optimally to risperidone. Paliperidone ER has a rapid onset of efficacy with improvements in symptoms seen as early as one week of treatment in documented drug trials.