

Dear Editor,

**Re: Delusional parasitosis: treatment with atypical antipsychotics**

DCW Aw, JY Thong, HL Chan

Recently, Aw et al<sup>1</sup> presented a valuable case series of patients from Singapore suffering from delusional parasitosis (DP). The authors highlighted the superiority of atypical antipsychotics (AA) over traditional substances in the treatment of DP based on their better overall tolerability, e.g., less extrapyramidal symptoms. Furthermore, they pointed to the higher potential of traditional antipsychotics like pimozide, the standard substance for treating DP, to cause a prolongation of the QTc interval which may lead to fatal ventricular arrhythmia. Herewith, we would like to add some remarks on the use of newer, second-generation AAs in DP.

- i) The authors falsely stated that risperidone is the only AA mentioned in the literature for the treatment of DP. By contrast, some case reports showed that olanzapine (not “olanzepine”) is effective in DP.<sup>2-5</sup> Sertindole has been used successfully as well.<sup>6</sup> Furthermore, in a few patients with DP, quetiapine has been administered.<sup>7,8</sup>
- ii) In case number 6, the authors reported a change of the antipsychotic medication from pimozide 4 mg to thioridazine 25 mg TDS in a 64-year-old patient. This strategy, however, is difficult to understand considering the authors' concerns about the cardiac risks of pimozide. Thioridazine has an even higher potential to prolong the QTc interval than pimozide and is considered the most dangerous antipsychotic substance on the market in terms of a prolonged QTc interval.<sup>9-12</sup> Since July 2000, it is available in the United States only with restricted labelling (“black box” warning) as advised by the Food and Drug Administration (FDA).<sup>13</sup> Therefore, thioridazine should be strictly avoided in patients with DP because of rather high cardiac risks in this mainly elderly population.

Controlled clinical trials on the use of second-generation antipsychotics in DP would be highly desirable to prove their efficacy and elicit possible substance-specific effects; however, such studies are difficult to conduct, given a) the nature of the illness, b) the rather low compliance of patients suffering from DP, and c) their rare presentation in professional medical services.

At present, only case reports on the use of AA in DP are available, most prominently on risperidone<sup>5,7,8,14-19</sup> and olanzapine (see above). Aw et al<sup>1</sup> presented one of the first case reports on quetiapine in the treatment of DP, using an age-adapted dose of 12.5 mg (see also references 7 and 8). For ziprasidone, we are not aware of a publication about its use in DP; however, the substance has a higher potential to

cause a QTc prolongation than other AAs. Sertindole has been voluntarily withdrawn from the market by the manufacturer in December 1998 in the UK and many European countries due to concerns about its potential to evoke cardiac arrhythmia and sudden death resulting from a prolonged QTc interval.

Clinicians should be aware of the fact that a recent meta-analysis on risperidone and olanzapine (compared with placebo) revealed a three-fold higher risk of stroke in elderly patients with dementia-associated psychosis (Committee on Safety of Medicines, 9 March 2004); the overall mortality was doubled in the olanzapine group, but not elevated under risperidone. In terms of a prolongation of the QTc interval, however, olanzapine is still considered the safest new antipsychotic.<sup>12</sup>

Hence, not only traditional antipsychotics, but also newer substances have specific risks that must be considered in an elderly population such as typical patients with DP. Therefore, in order to minimise the risk of QTc prolongation in DP, we recommend a) using individual, age-adapted doses of AAs, and b) caution with the co-administration of other drugs that also may prolong QTc (e.g., antiarrhythmics like amiodarone and ajmaline, macrolide and fluocinolone antibiotics, tricyclic antidepressants, triptanes, amantadine, chloroquine, cisapride).

Considering the overall risk profile and tolerability, olanzapine, risperidone and quetiapine may become the treatment of choice in DP in the future. Still, the benefits and risks of newer antipsychotics in the treatment of DP need further evaluation.

#### REFERENCES

1. Aw DC, Thong JY, Chan HL. Delusional parasitosis: case series of 8 patients and review of the literature. *Ann Acad Med Singapore* 2004;33:89-94.
2. Slaughter JR, Zanol K, Rezvani H, Flax J. Psychogenic parasitosis. A case series and literature review. *Psychosomatics* 1998;39:491-500.
3. Kumbier E, Kornhuber M. Dermatozoenwahn bei Multisystematrophie [Delusional ectoparasitic infestation in multiple system atrophy]. *Nervenarzt* 2002;73:378-81.
4. Freudenmann RW. Ein Fall von “Dermatozoenwahn” bei schwerer Herzinsuffizienz. Olanzapin im Rahmen einer multimodalen Therapie. [A case of delusional parasitosis in severe heart failure. Olanzapine within the framework of a multimodal therapy]. *Nervenarzt* 2003; 74:591-5.
5. Le L, Gonski PN. Delusional parasitosis mimicking cutaneous infestation in elderly patients. *Med J Aust* 2003;179:209-10.
6. Yorston G. Treatment of delusional parasitosis with sertindole [letter]. *Int J Geriatr Psychiatry* 1997;12:1127-8.
7. Kim C, Kim J, Lee M, Kang M. Delusional parasitosis as ‘folie a deux’. *J Korean Med Sci* 2003;18:462-5.
8. Wenning MT, Davy LE, Catalano G, Catalano MC. Atypical antipsychotics in the treatment of delusional parasitosis. *Ann Clin Psychiatry* 2003;15:233-9.

9. Glassman AH, Bigger JT, Jr. Antipsychotic drugs: prolonged QTc interval, torsade de pointes, and sudden death. *Am J Psychiatry* 2001;158:1774-82.
10. Reilly JG, Ayis SA, Ferrier IN, Jones SJ, Thomas SH. QTc-interval abnormalities and psychotropic drug therapy in psychiatric patients. *Lancet* 2000;355(9209):1048-52.
11. Reilly JG, Ayis SA, Ferrier IN, Jones SJ, Thomas SH. Thioridazine and sudden unexplained death in psychiatric in-patients. *Br J Psychiatry* 2002;180:515-22.
12. Zareba W, Lin DA. Antipsychotic drugs and QT interval prolongation. *Psychiatr Q* 2003;74:291-306.
13. Haddad PM, Anderson IM. Antipsychotic-related QTc prolongation, torsade de pointes and sudden death. *Drugs* 2002;62:1649-71.
14. Gallucci G, Beard G. Risperidone and the treatment of delusions of parasitosis in an elderly patient. *Psychosomatics* 1995;36:578-80.
15. Safer DL, Wenegrat B, Roth WT. Risperidone in the treatment of delusional parasitosis: a case report [letter]. *J Clin Psychopharmacol* 1997;17:131-2.
16. De Leon OA, Furmaga KM, Canterbury AL, Bailey LG. Risperidone in the treatment of delusions of infestation. *Int J Psychiatry Med* 1997;27:403-9.
17. Freyne A, Kenny E, Cooney C. Delusions of infestation—a case report of response to risperidone. *Ir Med J* 1999;92:435.
18. Elmer KB, George RM, Peterson K. Therapeutic update: use of risperidone for the treatment of monosymptomatic hypochondriacal psychosis. *J Am Acad Dermatol* 2000;43:683-6.
19. Moretti M, Varga G. Pszichiátriai kórképek bőrtünetei [Psychosomatic dermatologic symptoms]. *Orv Hetil* 2000;141:169-72.

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**Dear Editor,**  
**Re: Authors' Reply**

We thank Drs RW Freudenmann and C Schönfeldt-Lecuona for their comments on our recent publication, in particular their contributions of reports of the effectiveness of olanzapine in treatment of delusional parasitosis (DP). This will indeed widen the therapeutic options available to clinicians, the conventional antipsychotics being prone to cause extrapyramidal side effects and thus may affect compliance.

Some inquiries were raised about the switch of pimozide to thioridazine in Case Number 6. This strategy was adopted to lessen the extrapyramidal side effects, since pimozide is a very potent dopamine receptor antagonist. We are currently well aware of thioridazine's potential to prolong QTc interval, which increases the risk of fatal arrhythmias such as torsade de pointes. However, we would like to point out that the patient was actually treated in the early 1990s, before the warnings came about.

We concur with them the opinion that the effectiveness and safety of various atypical antipsychotics in DP need further evaluation, since some of them are associated with cerebrovascular accidents in the elderly. Indeed, in our case series, many of the patients are elderly with medical comorbidities. Many of them are thus sensitive to the effects of antipsychotics, and this will not only compromise their health, but may also adversely affect compliance if such issues are not addressed.

On behalf of the authors,  
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