

CASE REPORT

DELUSIONAL INFESTATION SUCCESSFULLY CONTROLLED WITH NEUROLEPTIC DEPOT INJECTION: A CASE REPORT

*Jamaluddin Ruzita**, *Najwa Baharuddin***, *Nurul Hazwani Hatta****

***Department of Psychiatry Department, Hospital Tuanku Fauziah, 01000 Kangar, Perlis, Malaysia; **Research Officer, Department of Psychiatry, Universiti Kebangsaan Malaysia Medical Centre (UKMMC), 56000 Cheras, Kuala Lumpur, Malaysia; ***School of Medicine, Medical University of Galway, Galway, Ireland.**

Abstract

Objective: Delusional infestation is a psychiatric condition in which a patient belief that they are infested with living organisms in the absence of any objective evidence. The objective of this case report is to highlight a rare case of delusional infestations in a patient with schizophrenia who misusing polysubstance abuse. **Methods:** We report a case of 36-year-old Malay gentlemen, unemployed, married with three children, known case of schizophrenia since 2013, with history of polysubstance abuse presented to the emergency department with symptoms of itching followed by a sensation of insects crawling, biting and burrowing under the skin on his head causing an ulcerated wound. **Results:** He was diagnosed to be suffering from schizophrenia and was successfully treated with monthly antipsychotic depot injection in view of his poor adherence to medication. On examination, ulcerated scalp wound measuring 4 x 4 cm was noted at the parieto-occipital region of the scalp. Skull X-ray and computerized tomography (CT) scan of the brain were normal. Electroconvulsive therapy (ECT) was introduced in view of slow treatment response and self-inflicted injury. The symptoms were successfully controlled after eight months, and no extrapyramidal side effect was observed. **Conclusion:** Patients with delusional infestation often poorly adhered to his treatment medication and the usage of depot injection of antipsychotic may benefited some patients to control the psychotic symptoms. *ASEAN Journal of Psychiatry, Vol. 17 (2): July – December 2016: XX XX.*

Keywords: Delusions, Infestations, Neuroleptic treatment, Case Report

Introduction

Delusional infestation is a psychiatric condition in which a patient belief that they are infested with living organisms in the absence of any objective evidence [1]. It may occur as a primary disorder in the absence of an underlying psychiatric condition or occurring in conjunction with another psychiatric condition, or as a consequence of medical illness, substance misuse or as a side effect of medications 2,3]. It can occur as a

delusional disorder, meeting ICD–10 criteria for persistent delusional disorder [4] and DSM–IV–TR criteria for delusional disorder, somatic type [5].

Case Report

This is a case of 36-year-old Malay gentlemen, unemployed, married with three children, known case of schizophrenia since 2013, with history of polysubstance abuse presented at the emergency department with symptoms of

itching followed by a sensation of insects crawling, biting and burrowing under the skin of his head for few weeks causing ulcerated wounds.

Initially, he believed that the intense itching caused by mites. He shaved his hair with a razor blade. Later, he was convinced that they were insects crawled on his scalp, especially at night, bit and infiltrated into his skin. He believed the insects would lay eggs, which would hatch out at any time and invade all his brains. Sometimes he could hear the noises made by the insects, especially at night. He described the insects was about 1-2 inches long, brownish in colour, having multiple legs

like small cockroaches, increased in number and was growing in size. He believed that the insect was making multiple tracks and sat hidden. He tried to get rid of the insects by shaving off his hair and scraping with a razor blade, pouring hot water at the head, burning his head by putting the head on, a heat stove, spraying aerosol insecticides and applying herbicide and traditional ointment on his head to prevent a bite by the insects. He denied suicidal or homicidal ideation. These resulted in profuse bleeding over the affected area and ulcerated wound. Mother noticed a pool of blood on the bathroom and all over the patient's room, on the pillow cases and mattress.



Figure 1(a)



Figure 1 (b)

Figure 1(a) and (b). Self-inflicted ulceration wound during the first clinical presentation



Figure 2(a)

Figure 2(b)

Figure 2(c)

Figure 2(d)

Figure 2(a),(b),(c), and (d). Severe lesion with recurrence of self-inflicted injury following the delusional infestation after cessation of oral antipsychotic medication



Figure 3



Figure 4(a)

Figure 4(b)

Figure 3. Patient provide proof of infestation 'match-box sign'. Figure 4(a) and 4(b). Delusion of infestation gradually subsided and ulceration wound healed after 8 months on monthly depot injection

He hardly slept at night due to the delusion, and he stopped working and refused to eat. He locked and isolated himself in his room and most of the time covered his head with a small towel. He denied suicidal or homicidal ideation. He was pale, afebrile and general

physical examination revealed normal blood pressure ranging from 100-130/68-100mmHg and pulse rate between 92-114bpm. Other physical examinations were unremarkable. There was ulcerated scalp wound measuring 4cm X 4cm at the parieto-occipital region of

the scalp. Examination did not reveal any evidence of insect on the scalp.

Mental status examination revealed calm, cooperative, well-groomed gentlemen wearing a small towel to cover his head. His speech was relevant and coherent with normal rate and volume. His affect was restricted. He was frustrated that the doctor can't see the insects and tried to convince that the insect was sat hidden. He tried to prove the existence of the alleged insects by showing the samples of the insects and the bits of skin. There were tactile hallucinations and somatic delusion. He had paranoid delusions where he believed that he had acquired the insects from his wife's ex-boyfriend. He believed that the guy was initially sent invisible knife through wind to cut on his head but failed. He had impaired judgement and poor insight.

Full-blood picture revealed microcytic hypochromic anaemia with haemoglobin 7.3g/dL. Other blood investigations were normal. His hepatitis C screening was reactive. Skull X-ray and computed tomography (CT) scan of the brain did not reveal any abnormality. He was admitted to the psychiatry ward and tablet olanzapine 10mg was started that was later titrated up to 15mg per day. He was given a course of 7 ECT's in view of slow treatment response, self-inflicted injury and suicidal tendencies. In view of poor oral compliance with poor insight and support, olanzapine was tailed off with simultaneous commencement of neuroleptic depot injection of fluphenazine decanoate 50mg per month. He was referred to the surgical and dermatological team while in the ward. He was discharged with two weekly visits by the Community Mental Health Team for wound inspection and monitoring symptoms. No extrapyramidal side effect was observed. Despite on monthly depot injection with psycho education, he persistently injured the affected area with razor blade, chemicals and pesticides. His delusion of infestation gradually subsided and eventually ceased only after eight months following the depot injection. Finally, he accepted that the experience of infestation was a delusion.

Discussion

Patients with delusional infestation often poorly compliant and notoriously difficult to engage with treatment due to lack of insight thus poses therapeutically challenging. It is essential to distinguish primary from secondary disorder since the approach is different. Multidisciplinary approach with collaboration between psychiatrist and dermatologist is necessary to provide complete treatment for the patients. Trabert established that significant improvements in the outcome of DI were achieved with the introduction of typical antipsychotics [6]. However, several studies reported the effectiveness of risperidone, quetiapine, olanzapine and amisulpiride [7, 8-10].

There was limited data suggest that depot antipsychotics might be a treatment option in delusional infestation. However, in schizophrenia like in this case report, depot antipsychotics have proven to have advantages in terms of therapy adherence and long-term outcome. Only one single open study investigating the usage of fluphenazine decanoate in delusional infestation and doses is relatively low but the results were impressive with 93% of patients responded to therapy, and 73% even fully remitted [11]. However, the sample size was small and there was lacked of a non active control. The usage of depot injection of antipsychotic may be justified in some patients, and the result is impressive. Further research is important to evaluate outcome and efficacy of the depot antipsychotics in delusional infestation.

Conclusion

The main difficulty in management is convincing the patients to take the oral medication. The patients should be offered other methods of treatment in order to increase the acceptability of treatment with antipsychotics by emphasizing possible symptom reduction due to antipruritic properties or decrease in agitation and mental preoccupation rather than the antipsychotic properties. Follow-up is important, as the risk of recurrence is high after cessation of antipsychotic medication.

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Corresponding author: Jamaluddin Ruzita, Consultant Psychiatrist, Department of Psychiatry Department, Hospital Tuanku Fauziah, Postcode Kangar, Perlis, Malaysia.

Email: ruzitajam@yahoo.com

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