To the Editors:

Delusional parasitosis

Delusional parasitosis is a clinical syndrome in which the patient falsely believes that she or he is infested by parasites. It could be associated with other psychiatric disorders or physical illnesses (1). This condition is also known as Ekbom's syndrome (2). The belief could be a delusion or an over-valued idea. It has also been described as a form of tactile hallucinatory state (2).

Delusional parasitosis is commonly seen in the elderly women. It is associated with schizophrenia, affective disorders and organic or induced psychoses. Cases are also reported following occipito-temporal cerebral infarction (3). In the American classification system it is classified under delusional disorder, somatic subtype (4). These patients believe that there are parasites such as lice, bugs, worms etc. underneath their skin or on the scalp, and damage their skin when attempting to remove these non-existent creatures. Delusional parasitosis with symptoms confined only to the eye resulting in ocular trauma has been reported (5). Another case where the symptoms were confined to the oral cavity has also been reported (6). Some patients present with delusions of intestinal infestation (7). In Sri Lanka, delusional parasitosis is encountered rarely. The following case histories are presented to emphasise important issues related to this condition.

Case 1. A 72-year old woman was pulling her hair from the scalp and damaging the skin in order to remove worms, bugs and lice from her body. She was strongly convinced that there were black-headed worms, bugs and lice beneath her skin and was extremely distressed. She felt them burrowing her skin and crawling all over her body. She applied various oils to kill the suspected parasites and then sought help from doctors. Since there was no response to the topical creams given by them, she sought a psychiatric opinion.

She gave a history of weight loss and sleep disturbance, and said that she found it difficult to enjoy now the things she used to enjoy. She looked miserable and distressed. Her predominant mood state was that of depression. Her symptoms were suggestive of a major depressive illness associated with delusions of parasitosis. Her full blood count, fasting blood glucose, serum creatinine, liver function tests and thyroid function tests were normal. She made a good recovery with fluoxetine combined with a small dose of a neuroleptic.

Case 2. A previously stable 76-year old married man presented with a delusional belief of infestation of his skin with ants for several months. There were numerous self inflicted injuries on his hands and arms. There was no persistent mood disturbance to suggest a depressive illness. His cognitive functions were normal. Full blood count, thyroid function tests, serum creatinine and the liver function tests were normal. He made a good recovery with risperidone.

Case 3. A 69-year old married carpenter presented with numerous self inflicted skin lesions on his hands and feet. He strongly believed that there were ants beneath his skin, hurting him. He believed that the ants were inside his nose too. He admitted to feeling miserable and low in his mood. His predominant mood state was that of depression. He made a good recovery with a combination of fluoxetine and trifluoperazine. He was physically normal and his basic investigations were also normal.

Case 4. A 36-year old married man with a history of binge drinking presented with a belief of beetles eating his skin during the alcohol withdrawal period. He was anxious and distressed about his experiences and had scratch marks all over the body. The symptoms subsided when he was detoxified with a reducing schedule of chlordiazepoxide.

Case 5. A 74-year old woman on oral hypoglycaemic drugs for diabetes, presented with low mood, anhedonia and a complaint of worms and small insects crawling underneath her skin over a period of four months. She was so distressed by the symptoms that she pulled out the hair and damaged

the skin attempting to remove the worms. Her symptoms resolved with antidepressants in combination with low dose antipsychotics.

The fourth case history illustrates delusional parasitosis during alcohol withdrawal. The first, third and fifth cases describe delusional parasitosis associated with a depressive disorder. The second case history is a delusional disorder with delusional parasitosis. All patients had self inflicted injuries as a result of delusions.

Patients with delusional parasitosis often seek treatment for the skin lesions from general practitioners or dermatologists. Some may resort to traditional methods such as applying oils. Early identification is important to prevent mismanagement. A thorough assessment is essential as the symptoms could be associated with diabetes mellitus and dementia (8). The general assumption is that monosymptomatic hypochondriacal psychosis including delusions of parasitosis are difficult to treat. Pimozide has been used as a first line drug. However pimozide has serious cardiac side effects. Risperidone is beneficial in the treatment of these disorders and some authors recommend it as a first line therapy (9). Treatment with a low dose of high potency neuroleptic is generally recommended (10). If the patient has concomitant depressive symptoms anti-depressants can also be prescribed.

Minimising social isolation and giving supportive psychotherapy is important as many elderly patients with this condition are socially isolated. Often liaison between dermatologist, general practitioner and psychiatrist is essential in the management of this condition.

References

1. Driscoll MS, Rothe MJ, Grant-Kels JM, Hale MS. Delusional parasitosis: a dermatologic, psychiatric and pharmacologic approach. *Journal of the American Academy of Dermatology* 1993; **29**: 1023-33.
2. Sims A. Symptoms in the mind, An introduction to descriptive psychopathology. 2d ed. London: W.B. Saunders, 1995: 123-4.
3. Nagaratnam N, O'Neile L. Delusional parasitosis following occipito-temporal cerebral infarction. *General Hospital Psychiatry* 2000; **22**: 129-32.
4. Diagnostic and statistical manual of mental disorders. 4 ed. Washington DC: American Psychiatric Association, 1994.
5. Sherman MD, Holland GN, Holselaw DS, Weisz JM, Omar OH, Sherman R.A. Delusions of ocular parasitosis. *American Journal of Ophthalmology* 1998; **125**: 852-6.
6. Maeda K, Yamamoto Y, Yasuda M, Ishii K. Delusions of oral parasitosis. *Progress in Neuro-psychopharmacology and Biological Psychiatry* 1998; **22**: 243-8.
7. Ford EB, Calfee DP, Pearson RD. Delusions of intestinal parasitosis. *Southern Medical Journal* 2001; **94**: 545-7.
8. Bhatia MS, Jagawat T, Choudhry S. Delusional parasitosis: a clinical profile. *International Journal of Psychiatry and Medicine* 2000; **30**: 83-91.
9. Elmer KB, George RM, Peterson K. Therapeutic update: use of risperidone for the treatment of monosymptomatic hypochondriacal psychosis. *Journal of the American Academy of Dermatologists* 2000; **43**: 683-6.
10. Rasanen P, Erkonen K, Isaksson U, Koho P, Varis R, Timonen M, et al. Delusional parasitosis in the elderly: a review and report of six cases from northern Finland. *International Psychogeriatrics* 1997; **9**: 459-64.

K A L A Kuruppuarachchi, *Senior Lecturer, and* **S S Williams,** *Lecturer, Department of Psychiatry, Faculty of Medicine, University of Kelaniya. (Correspondence: KALAK, telephones + 94 1 2958219 and + 94 1 2958039.* *Competing interests: None declared. Received 19 May 2002, revised version accepted 9 June 2003).*