DELUSIONAL PARASITOSIS OF BODY ORIFICES - A CULTURAL VARIANT?
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SUMMARY
Predominant or specific involvement of the eyes, ears, nostrils, mouth, anus and urethra (the body orifices) has not previously been reported in the literature on delusional parasitosis. Their involvement in the cases reported here is discussed in the context of the Hindu religio-cultural belief system which attaches special significance to these organs in the personal quest for physical, mental and spiritual purity. The involvement of the ears, in particular, appears to be influenced by native healing methods.

INTRODUCTION
Delusional parasitosis is a persistent condition in which the patient falsely believes that small insects (fleas, vermin or maggots) have infested his/her skin. The syndrome is classified as a subtype of Monosymptomatic Hypochondriacal Psychosis (Munro, 1978). This is best characterized as a primary delusion, though it is sometimes described as an elaboration of a primary pathological experience such as tactile hallucination, paresthesia or pruritus (Berrios, 1985). The delusion can sometimes occur within the context of other psychiatric disorders such as schizophrenia, frank depressive illness or significant organic brain syndrome or in physical illnesses such as pellagra (Muller, 1985). In general, the description of delusional parasitosis mentions only the involvement of the skin and the tissues underneath.

This paper is a compilation of observations made in seven cases of delusional parasitosis in whom there was a predominant involvement of nine orifices (eyes, ears, nostrils, mouth, anus and urethra), as well as the skin. This presentation seemed unusual as there are no reports of such a clinical phenomenon in this disorder. The paper discusses whether such unusual presentation could be attributable to the influence of the Hindu religious and cultural belief system which attaches special significance to these orifices with respect to physical, mental and spiritual well-being.

CASE REPORTS
The seven cases were all out-patients from a general hospital in Madras, India. They were examined independently by the authors using the Present State Examination (Wing et al., 1974) and clinical psychiatric interview. Physical illnesses, as well as cognitive and sensory impairments that could be related to the symptom of parasitosis were excluded by relevant examination and investigation. The diagnosis of delusional parasitosis was made by consensus in all instances where the delusion was observed to be an isolated phenomenon, and minor symptoms such as anxiety and depression occurred only as secondary phenomena.

There were 3 males and 4 females. 5 patients were below 40 years of age. All of them were of the Hindu faith. The mode of onset of the delusion was sudden in each case, with no other primary psychopathology prior to onset. Two patients had involvement of all nine orifices along with generalized skin infestation and the other five had involvement of only the ears. Two of the five patients with auricular involvement experienced infestation spreading from the involved ear to the adjacent skin of the scalp and face, whereas in the other three, only the ears were involved. The infestation began in the ears in all the five cases with auricular involvement. Two case histories given below illustrate the nature of the delusion.

CASE 1:
A 60 year old male farmer reported to the hospital Dermatologist with the complaint that worms were crawling all over his body for the past 18 months. He described its sudden onset when he felt a single worm (pin worm like) entering his scalp while he was bathing in a pond near his village. This worm is to have multiplied subsequently and spread throughout his body and began to come out through the orifices. During examination, he removed dirt and mucous secretion from the ears, eyes and nostrils and explained them as dead or alive. He showed marked improvement to the level of complete disappearance of the delusion after twelve weeks of treatment with 15 mgms/day of Trifluoperazine. He was followed up for a period of over four years and the course of the illness was punctuated with relapses on discontinuation of therapy and full remission with Trifluoperazine.

CASE 2:
A 28 year old illiterate housewife living in the suburbs of Madras city presented to an ENT surgeon with the complaint of presence of several fleas in her right ear for the past two years. Two years ago, while feeding a stray dog near her house, she had experienced the entry of a dog flea into her right ear. This was followed by pain and buzzing in the ear and after a few days she experienced the entry of another flea into the same ear while resting at home. Subsequently there was an increase in the number of insects in her ear as both the fleas mated and laid eggs, according to the patient. She went to the native healer several times who 'removed' about 300 insects from her ear during the course of treatment. The patient brought the "insects" removed at the last session in a bottle. Examination of the contents showed dead flies, mosquitoes, bugs and insect wings. Her delusion remitted partially (only the idea persisted) following 4 treatments of ECT and this was maintained during the subsequent 9 months of follow up on oral Chlorpromazine at a dosage of 200 mgms/day.
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DISCUSSION

The culture in which a patient lives has been shown to influence the form, course and response to treatment of mental illnesses. Kivell (1972) pointed out that the secondary features of psychiatric illness, such as the content of delusions and hallucinations, are frequently determined culturally. We hypothesize that the roots of meaning for the unusual form of delusional parasitosis reported in this paper can be traced to the Indian Hindu religio-cultural belief system.

For the Hindu, the body is a “dwelling with nine doors” comprising the nine orifices, called NAVADWARAS in the Sanskrit language (NAVA = nine, DWARA = doors). The paired eyes, ears and nostrils, the mouth, the anus and the urethra are the portals of communication between body, soul, and the surrounding physical and spiritual world. Maintenance of the purity and moral integrity of these nine organs is considered essential for a healthy and pure life. An individual’s spiritual growth and self-actualization is evaluated in terms of his or her control over the pleasures sought through these nine organs. This thought is reflected even in the practice of the ancient system of Indian Medicine, the Ayurveda, which was founded in the 12th century B.C. The Ayurveda emphasized the relationship between the function of these orifices and mental health. It asserted that the MANAS (roughly but inadequately translated as the Mind), which consists of the INDRIYAS or five organs of sense (eyes, ears, tongue, nose and skin) and five motor organs (those of speech, evacuation, reproduction, touch, and walking), is influenced by both bodily and mental humors. Upsetting the balance of these humors was considered to be the cause of mental illnesses, which could be reflected and expressed in the bodily sphere.

Kakkar (1982), in discussing this issue, states that the Indian body image stresses a constant interchange between the body and the environment through the Indriyas. The sin expressed as dirt symbolization is, according to him, relatively accessible to the Indian’s conscious mind and is neither disguised nor displaced to the extent that it is in the West. The Indian readily engages in public hawking, eruption, spitting, coughing, regurgitation, passing wind and the digging of nostrils and ears. This is in contrast to the average North American or European who considers body apertures to be socially taboo.

The everyday activities prescribed for a Hindu reflect the religio-cultural significance of the nine organs. The early morning rituals involve bowel and bladder evacuation, cleansing of the nine organs and the whole body with holy water, gazing at holy objects such as the sun or mystic figures, reading or chanting, and listening to holy scriptures and devotional hymns. For the orthodox, it is only proper to engage in subsequent daily pursuits after all these rituals have been performed. They are believed to prepare the mind, body and spirit for proper functioning during the rest of the day.

It is argued that such a deeply-entrenched religio-cultural belief and practice system as that of the Hindu can find expression in the production of a psychopathological symptom (Wittkower, 1969; Rao & Nammalwar, 1982). In delusional parasitosis, the infestation of the nine orifices by insects and worms can be interpreted as a symbolic expression of the ‘decay’ or ‘rot’ in these organs due to lack of control over them by the MANAS (ego) due to psychotic disorganization.

The ears were observed to be more often affected than the other organs in our study. The ears are probably of additional significance for the Hindu, who believes that these organs attain spiritual purity by listening to holy scriptures (Anna, 1971). This is believed to be possible even during intrauterine life, as was illustrated by the mythological character Prahlada, who is described to have learnt the glory of God and attained spiritual enlightenment while in the womb by listening to the teachings of Sage Narada (Sastri, 1988). Touching of the external ears for their cleansing influence on the soul forms part of the prayer ritual offered to Hindu Gods (Anna, 1971). Hence, the ears can be said to occupy a more important position than the other orifices in relation to maintenance of spiritual health in the Hindu psyche and are thus more susceptible to involvement in psycho-pathological phenomena.

There could be other reasons for the predominantly official involvement in our cases which could be proposed as alternatives to the religio-cultural influence hypothesis discussed above. In the two patients with generalized involvement, the ‘parasites’ were felt to come out of the body through the orifices. The simple reason given by the patients for this was that the ‘insects’ became too numerous and were leaving the body through these orifices. The frequent involvement of the ears alone could also be due to the fact that the ears are the least protected of all the orifices, either anatomically or by reflex mechanisms, from entry by real parasites. Accidental entry of insects into the ears at home or in the paddy field is not an uncommon experience for the common man in this region, given the environment wherein insects of several kinds abound. This natural fear is possibly compounded by well-known methods of practice by native healers in this region, described below.

The native healers who specialize in these cases can be seen practising at weekend village markets, and are known to ‘remove’ scores of insects from the patients’ ears at each session. Their procedure consists of inserting a hollow tube into the affected ear, blowing tobacco smoke into it and then sucking out insects with their mouth. They then spit the insects out and present them to their patients. Their ‘extractions’ consists of dead flies, mosquitoes, insect wings and other insect parts. Even live insects are sometimes ‘extracted’. All this the healer probably does by storing the insects in his mouth or hand before he starts to ‘suck’ them out of the patient’s ear. Often, the patient is the only witness to the procedure. This experience with the healer had taken place in three out of the five cases of ear involvement in our study. Altogether, about five hundred
insects were removed from these three patients over several sessions of treatment.

This procedure often gave temporary relief to the patients from pain and other secondary symptoms, but it only helped strengthen their conviction in the delusion. Just as cultural beliefs have been described as influencing the content of psychotic symptoms, commonly practiced native treatment methods, such as those described in these case reports, could also perhaps modify the presentation of a delusion. A parallel can be drawn in the observation of delusions involving black magic and witchcraft in patients living in cultures which believe and indulge in such practices.

There were some other interesting features in the patients reported here, who formed a part of a larger cohort of nineteen patients with delusional parasitosis under treatment and follow up at the study centre. The generally large number of cases seen, frequent occurrence in males, younger age, shorter duration of illness and good response to antipsychotic treatment other than pimozide were observed in the whole cohort. These are reported and discussed elsewhere (Srinivasan et al., 1994).

The hypotheses put forward need to be tested by studying the phenomenology of delusional parasitosis in other Hindu and non-Hindu cultures. It is to be noted that reports from the West have not referred to such a phenomenon. Studies on this unique clinical population should also explore the local notions on the vulnerability of the ears to actual infestation and the native treatment methods, if any, adopted. Studies conducted with these considerations could help clarify whether the orificial involvement in delusional parasitosis is an influence of religio-cultural factors or local beliefs and treatment practices or some combination of both.

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