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Pseudocyesis Preceding Psychosis

Pseudocyesis is an uncommon condition in which the psychological and somatic phenomena are usually thought to arise with neurotic rather than psychotic illness. We report a patient whose pseudocyesis took a course not previously described,

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culminating in an acute schizophrenic episode. Despite this she demonstrated many similarities with neurotic patients previously described in the literature. A phenomenological explanation, the belief of pregnancy as an overvalued idea, is discussed.

Pseudocyesis is defined as the conviction of a non-pregnant woman that she is pregnant, occurring with symptoms associated with pregnancy. It excludes delusions of pregnancy during psychosis, feigned pregnancy in malingering, endocrine disorders such as the galactorrhoea–amenorrhoea syndrome, and pelvic or abdominal tumours causing symptoms of pregnancy (Steinberg *et al*, 1946; Cohen, 1982). Pseudocyesis is found especially in societies where there is much cultural pressure on women to have children (Cohen, 1982). It may be considered as a defence against the wish for pregnancy, fear of pregnancy, or even resolving conflict between the two (Christodoulou, 1978; Murray & Abraham, 1978; Cohen, 1982; Zuber, 1984; d'Orban, 1982). Its origins have usually been traced to a disorder of personality (Fried *et al*, 1951; Starkman, 1984). Chronic social deprivation and problematic relationships figure prominently in case reports (Christodoulou, 1978; Rosenberg *et al*, 1983; Hardwick & Fitzpatrick, 1981), while others stress the relevance of loss and separation (Brown & Barglow, 1977; Weddington & Porter, 1984). Several authors mention the naivety, gullibility, and lack of sophistication of these patients.

Some of the physiological aspects of pregnancy may be elicited in experimental animals by the administration of drugs which deplete central catecholamines (Cohen, 1982). In the human, such depletion may occur spontaneously in depressive illness, and patients with both depression and pseudocyesis have been reported (Starkman *et al*, 1985; Brown & Barglow, 1971). Three of forty-seven patients of child-bearing age who committed suicide, described by Goodwin & Harris (1979), experienced pseudocyesis, supporting the notion of an organic abnormality common to depression and pseudocyesis. Neuroendocrine abnormalities such as are found in depressed patients have been reported in a patient with pseudocyesis (Ayers & Seiler, 1984). There are also accounts of depressive illness occurring after resolution of pseudocyesis (Christodoulou, 1978; Silber & Abdalla, 1983). A bewildering variety of neuroendocrine disturbances have been described in pseudocyesis (Steinberg *et al*, 1946; Osotimetrin *et al*, 1981; Tulandi *et al*, 1982, 1983; Ayers, 1984; Starkman *et al*, 1985; Devane *et al*, 1985). It is clear that no single neuroendocrine profile is common to all patients. The question of which comes first, the belief of pregnancy or the endocrine abnormalities, has not been definitely answered, although endocrine abnormalities may return to normal after the diagnosis is revealed to the patient (Zuber, 1984).

The observed incidence of pseudocyesis is very variable. Brenner reported twenty-one cases during four consecutive months in Soweto, South Africa, representing 1:200 new antenatal patients (Brenner, 1976). In Boston, USA, less than 10 cases were seen over 3 years among 20 000 pregnant women (Cohen, 1982). No data exists to break down cases by medical or psychiatric diagnosis. The literature implies that pseudocyesis has become a rare condition, but we have seen two cases during the past year, one with an anxiety neurosis (ICD–9 300) (World Health Organization, 1978), the other presented here.

Case report

A 21-year-old woman, married with two children, presented to the Accident and Emergency Department (A & E), claiming that she was 9 months pregnant and actually in labour. Her belief was clearly false, and delusional in nature. She had been disturbed for 2 days and had voiced other delusions such as that her whole family were about to have brain haemorrhages and her husband had strangled their children. She had expressed suicidal ideas, sleep and appetite were much reduced, and she had wept copiously and wandered about the house in an agitated fashion, at one point physically attacking her husband. The patient absconded from A & E in her bare feet and was thought to be psychotic by the duty psychiatrist. She was admitted under Section 2 of the Mental Health Act, 1983.

The patient had an emotionally deprived background. Among her mother's ten pregnancies there were five miscarriages, a stillbirth, and a neonatal death. Her father, who had beaten his wife and children throughout the marriage, was divorced by her mother when the patient was aged 5. Her mother remarried but her second husband was unable to provide for his family and they were divorced when the patient was aged 14. Her mother suffered from cardiac disease and 'depression' as well as obstetric problems and was frequently in hospital, resulting in the patient being fostered many times.

During her mother's second divorce, the patient refused to go to school and was referred to the Child Psychiatry Department, but the family failed to keep appointments. The patient then ran away from home to live with a relative. At the age of 15 she moved, to live with her boyfriend and his father. She became pregnant and married her boyfriend, but they quarrelled with his father and returned to the patient's mother. The patient's husband later argued with his mother-in-law and the couple found their own home

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where they had another child. It is relevant that the patient had a very strong but ambivalent relationship with her mother, who was a powerful influence upon her. She admitted that the continuing feud between her husband and her mother put her under a great deal of stress.

Seven months before admission, the patient menstruated heavily and described losing 'clots and bits of skin' to her mother, who promptly declared that the patient had suffered a miscarriage. The patient then began to believe that she had conceived again and this was reinforced by amenorrhoea. Two months before admission, the patient had her intra-uterine device (IUD) removed, and a pregnancy test proved negative. The patient, however, still believed that she was pregnant, although there were no other symptoms. Her abdomen was large owing to long-standing gross obesity. The patient's mother and husband maintained a neutral attitude towards the supposed pregnancy. The patient recalled 'feeling depressed' for a few months prior to the period of pseudocyesis, and during it. Three weeks before admission, the patient's mother, who believed herself to be a medium and who regularly attended a spiritualist church, involved the patient in meditative practices. During this meditation the patient began to hear voices telling her that she was pregnant. On the day of presentation she 'felt the waters break' and came to A & E. On the ward the patient remained psychotic. Her consciousness was clouded, she was thought-disordered, her affect was flattened and perplexed. She heard voices telling her that the nurses were imposters and described how nurses were stealing her thoughts away. Ideas of reference emanated from the ward television; people described her thoughts. The patient was commenced on neuroleptics and her psychosis abruptly disappeared 5 days after admission. She presented as a pleasant but unsophsticated person of limited intelligence. Her insight was that meditating and the worry of some financial problems had made her ill. Her periods returned and she no longer believed she was pregnant. A diagnosis of acute schizophrenic episode (ICD-9 295.4) was made.

Discussion

Our patient had several of the attributes and experiences described as characteristic in pseudocyesis: her deprived background, limited intelligence, and chronic problems with family relationships. Owing to the powerful influence of her mother, she believed she had lost a baby – fertile ground for the desire for, and belief in, a further pregnancy. Her history of depression and suicidal ideas concurs with descriptions of non-psychotic cases in the literature. Recently, only two patients with pseudocyesis who were also psychotic have been described: a paranoid schizophrenic man (Evans, 1984) and a schizophrenic girl who developed galactorrhoea on chlorpromazine, followed by pseudocyesis (Cramer, 1971). What, then, is the difference between our patient, who became psychotic, and the vast majority of reported cases, who do not?

The question may be answered phenomenologically if the belief of being pregnant is accorded the status of an overvalued idea (McKenna, 1984). Such ideas, although preoccupying the patient to an abnormal degree, arise in a way which is comprehensible to some extent: they lack the alien quality of delusions and are neither resisted nor regarded as senseless. Unlike obsessions, overvalued ideas resemble normal, strongly held convictions in the understandable way they develop out of personality and experience, and they may be the pathological expression of a basically normal behaviour pattern. However, it is recognised that overvalued ideas occur in a variety of settings ranging from the purely psychogenic, e.g. personality disorder, to the purely organic, e.g. alcoholic dementia. In particular, the ideas may become delusional, and the patient's mental state become psychotic. It is suggested that our patient was one whose overvalued idea represented a sign of emerging schizophrenia and became a delusion once the psychosis had emerged. Treatment of her psychosis brought about the loss of her delusion; such a course is recognised in the literature on overvalued ideas. The failure of the emergence of absolute evidence of pregnancy – positive HCG test, ultrasonic or radiological images of foetal parts, and finally labour – may be equally potent in terminating ideas of pregnancy in the non-psychotic patient with pseudocyesis. Other disorders with overvalued ideas may not afford such dramatic opportunities for challenge – hence their well-recognised resistance to treatment.

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The Use of Naloxone During the Withdrawal Syndrome from Heroin

Attempts to repeat in human subjects animal studies in which naloxone stopped withdrawal symptoms after prolonged use of heroin failed. Nevertheless, suggestions for further studies are made, as the subjects' subsequent desire for opiates did seem attenuated.

Hendrie (1985) reported interesting experiments on rats made addicted to opiates. It was found that giving naloxone when the opiates were withdrawn, and the withdrawal syndrome was established, reversed that syndrome. He hypothesised that naloxone blocks opiate receptors, which are also responsive to anti-opiate substances in brain [possibly adrenocorticotrophic hormone (ACTH)]. The withdrawal syndrome, he suggested, was due to imbalance between the encephalins and anti-encephalins. Blocking both effects on receptors therefore causes withdrawal in the presence of excess opiates, but reverses withdrawal when the receptors are being occupied by anti-opiates. The theory seemed less convincing to us than the observation. We were interested in the possibility that the human withdrawal syndrome could be reversed by naloxone. If it could, then perhaps further work with long-acting derivatives could block withdrawal and make future use of opiates pointless.

It seemed to us that the results had to be very striking, as our experience has led us to believe that withdrawal syndromes are seldom a serious problem. We detoxify patients in 4 days with reducing doses of methadone. However, Resnick *et al* (1977) have used naloxone (1.2 mg) every 30 min during detoxification and this seemed to assure us that it was safe to do so. Blachly *et al*, cited by Kurland & McCabe (1976), gave large doses of naloxone during detoxification and noted an initial increase in withdrawal symptoms, although on the following day there was an absence of such symptoms. (See also Blachly, 1976).

Method

Subjects

Five volunteers, two female and three male, all with long histories of opiate dependence (2–7 years), who were not suffering from a concurrent medical or psychiatric

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