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CASE REPORT



Pseudocyesis in a patient with anorexia nervosa: etiologic factors and treatment approach

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ABSTRACT

Objective: Pseudocyesis is a rare condition in which a non-pregnant woman has all signs and symptoms of pregnancy, such as abdominal and breast enlargement, cessation of menses and sensation of foetal movement. We hereby present a case of a young woman who presented with pseudocyesis while experiencing anorexia nervosa.

Methods: After psychiatric examination, psychopharmacotherapy including cognitive behavioural therapy (CBT) techniques and medication for ongoing depression and eating disorder was provided.

Results: After six months of psychopharmacotherapy, depressive mood and belief of being pregnant were diminished; but after two years, she presented to psychiatry for depression and pseudocyesis symptoms again.

Conclusions: Etiologic risk factors and treatment approaches including psychotherapy and psychopharmacology are addressed in this case report.

ARTICLE HISTORY

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KEYWORDS

Pseudocyesis; anorexia nervosa; psychotherapy; psychopharmacology; etiology; treatment

Introduction

The term of pseudocyesis, from the Greek words *pseudes* (false) and *kyesis* (pregnancy), refers to an imaginary, false sensation of being pregnant in a woman who is not. It is associated with objective signs and reported symptoms of pregnancy, which may include abdominal enlargement, reduced menstrual flow, amenorrhoea, subjective sensation of foetal movement, nausea, breast engorgement and/or secretions and labour pains at the expected date of delivery [1]. It was included in the Somatic Symptom Disorders, Not Elsewhere Classified section in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) [1].

We have to emphasize that the definition of pseudocyesis is quite different from the delusion of pregnancy found in psychotic disorders [2,3]. Delusion of pregnancy is a Delusional Disorder classified by the DSM-5 within Schizophrenia Spectrum and Other Psychotic Disorders. It refers to the false beliefs of being pregnant in the absence of physical signs of the pregnancy that may be experienced by psychotic women/men [3,4], has presented a part of a Clerambault's, Capgras or Couvade syndrome [5–9] or a neurological condition like the frontotemporal lobar degeneration [10].

Etiology of the pseudocyesis is still unclear, but the theories that emphasize an interaction between psychological factors and the reproductive system are

accepted currently [3]. It is speculated that pseudocyesis has been tied to hyperprolactinemia that lead to imitate many of the symptoms of pregnancy such as amenorrhoea, galactorrhoea, abdominal distension, apparent foetal movements and labour pains at the expected date of delivery [3]. Hyperprolactinemia can result from psychological stress or can be raised by organic conditions and nipple stimulations as well as by drugs such as oestrogens, antidepressants, antihypertensives, protease inhibitors, opiates, benzodiazepines, cimetidine and dopamine blockers [5,11]. Psychosocial factors that may be implicated the development of pseudocyesis were lower socioeconomic status, lower educational attainment, emotional chaos, childhood sexual abuse, disturbed family dynamics, chronic social deprivation and ambivalence about pregnancy and loss [5,12,13] and therefore, most pseudocytic women suffer from major depression, anxiety and/or emotional stress [3,14]. The deficit in brain dopamine and norepinephrine activity in major depressive disorder increases sympathetic nervous system activity, dysfunction of central nervous system catecholaminergic pathways and steroid feedback inhibition of gonadotropin-releasing hormone so this may be associated with hyperprolactinemia and may be a shared endocrine trait between major depression and pseudocyesis [3,15,16].

Here, we report a case who presented with pseudocyesis while she was experiencing anorexia nervosa and

major depression. We speculate on the possible mechanisms of a relationship between psychiatric background, drug-induced hyperprolactinemia, and pseudocyesis.

Case report

A 23-year-old, single woman from higher socioeconomic status was reported to gynaecology and obstetrics outpatient clinic for amenorrhoea, distended abdomen, loss of appetite, nausea, vomiting and feeling foetal movement in last weeks. Gynecological examination revealed a nongravid, empty, anteverted uterus with normal pelvic structures and urine for pregnancy test was negative. Laboratory findings including complete haemogram, blood glucose, creatinine, urea, lipid profile and thyroid hormones were within normal range. Detailed history showed that she had been diagnosed with anorexia nervosa and depression that had been controlled by pharmacotherapy involving olanzapine (10 mg/day) and sertraline (100 mg/day) after her father's death.

First psychiatric examination revealed that she was looking very thin and younger than her age. Her Body Mass Index was 18.2 at our first examination. She told us that she gained 6 kilos after sertraline and olanzapine therapy, but she had an intense fear of gaining weight and was seeing her body as overweight. She was neatly dressed, conscious, oriented to person, time, place, and situation, well-communicated and having an anxious affect. She was speaking coherently, she had depressive thoughts about losing her father and ongoing intrusive behaviours of her mother. She still had a strong belief of being pregnant. Her thought was considered as an overvalued idea rather than a delusion, because she did not have any other psychotic symptoms and she argued that if another gynaecologist confirms that she was not pregnant, she would accept it.

In the treatment approach, we planned to use psychopharmacotherapy including cognitive behavioural therapy (CBT) techniques [17] (to help patient see the need for weight gain, help her to regain weight and at the same time address her eating disorder psychopathology) and medication for ongoing depression and eating disorder. For medical treatment, we explained that she was experiencing a false pregnancy and this may be a result of major depression and we used to continue sertraline and olanzapine therapy. At the fourth week of the treatment, mirtazapine 15 mg/day was added for insomnia. Peripheral oedema occurred during the treatment of mirtazapine, so mirtazapine was stopped and symptoms of oedema disappeared rapidly. After six months of psychopharmacotherapy, depressive mood and belief of being pregnant were diminished, she returned to her normal weight and a significant increase in her level of functioning was observed.

After two years, she presented to psychiatry for depression and pseudocyesis symptoms again. This time, she had been initiated sertraline and olanzapine treatment by her own, and higher prolactin serum levels were considered. In the second treatment process, we planned to change olanzapine to aripiprazole and reality-based, problem-solving supportive psychotherapy was administered. After two months of psychopharmacotherapy, serum prolactin levels decreased, pseudocyesis symptoms disappeared and she resumed menses again.

Discussion

To our knowledge this is the first report of pseudocyesis in a case with anorexia nervosa. According to the dynamic psychological component of pseudocyesis, it always occurs in the context of a wish or fear of pregnancy, emotional conflict, stress or ambivalence [13]. In this case report, emotional difficulties after losing her father may be associated with fantasies and wishes of becoming pregnant as a way of achieving love object again while the disturbed relationship with her mother causes eating disorder.

In addition, to this dynamic psychological component, the deficit in brain dopamine and norepinephrine activity like in major depression [3] and/or drug-induced hyperprolactinemia [18] could be the other predictors of pseudocyesis in this case (also in the second time of pseudocyesis).

Conclusion

A better understanding of etiology in pseudocyesis requires experimental study design but since it is a rare syndrome, case reports may still provide valuable information for clinicians. Careful scrutiny for the aetiological factors of cases will shed more light on this and other somatic disorders.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- [1] Association AP. Diagnostic and statistical manual of mental disorders (DSM-5). Arlington: American Psychiatric Pub; 2013.
- [2] O'Grady JP, Rosenthal M. Pseudocyesis: a modern perspective on an old disorder. *Obstet Gynecol Surv.* 1989;44(7):500–511.
- [3] Tarín JJ, Hermenegildo C, García-Pérez MA, et al. Endocrinology and physiology of pseudocyesis. *Reprod Biol Endocrinol.* 2013;11(39):1–12.
- [4] Brooks JG. Pseudocyesis in a 6-year-old girl. Follow-up report. *J Am Acad Child Psychiatry.* 1985;24(3):359–362.

- [5] Seeman MV. Pseudocyesis, delusional pregnancy, and psychosis. The birth of a delusion. *World J Clin Cases*. 2014;2(8):338–344.
- [6] Kornischka J, Schneider F. Delusion of pregnancy. A case report and review of the literature. *Psychopathology*. 2003;36(5):276–278.
- [7] Basil B, Mathews M. A couvade syndrome variant? *Psychosomatics*. 2006;47(4):363–364.
- [8] Budur K, Mathews M, Mathews M. Couvade syndrome equivalent? *Psychosomatics*. 2005;46(1):71–72.
- [9] Chatterjee SS, Nath N, Dasgupta G, et al. Delusion of pregnancy and other pregnancy-mimicking conditions: dissecting through differential diagnosis. *Med J of Dr DY Patil University*. 2014;7(3):369–372.
- [10] Lerner AJ. Delusion of pregnancy in frontotemporal lobar degeneration with motor neurone disease (FTLD/MND). *Behav Neurol*. 2008;19(4):199–200.
- [11] López M, Rodríguez JLR, García MR. Physiological and pathological hyperprolactinemia: can we minimize errors in the clinical practice? Rijeka: Intech Open Access Publisher; 2013.
- [12] Makhal M, Majumder U, Bandyopadhyay G. Psychodynamic and socio-cultural perspective of pseudocyesis in a non-infertile Indian woman: a case report. *Editorial Case Report*; 2013; 70.
- [13] Ibekwe PC, Achor JU. Psychosocial and cultural aspects of pseudocyesis. *Indian J Psychiatry*. 2008;50(2):112–116.
- [14] Small GW. Pseudocyesis: an overview. *Can J Psychiatry*. 1986;31(5):452–457.
- [15] Lambert G, Johansson M, Ågren H, et al. Reduced brain norepinephrine and dopamine release in treatment-refractory depressive illness: evidence in support of the catecholamine hypothesis of mood disorders. *Arch Gen Psychiatry*. 2000;57(8):787–793.
- [16] Hernández I, Parra A, Méndez I, et al. Hypothalamic dopaminergic tone and prolactin bioactivity in women with polycystic ovary syndrome. *Arch Med Res*. 2000;31(2):216–222.
- [17] Calugi S, Dalle Grave R, Sartirana M, et al. Time to restore body weight in adults and adolescents receiving cognitive behavior therapy for anorexia nervosa. *J Eat Disord*. 2015;3:776.
- [18] Flanagan PJ, Harel Z. Pseudocyesis in an adolescent using the long-acting contraceptive Depo-Provera. *J Adolesc Health*. 1999;25(3):238–240.