Pseudocyesis

Stephanie J. Campos, BSN, DNP, and Denise Link, PhD, FAAN

ABSTRACT

Pseudocyesis is a rare, but debilitating somatic disorder in which a woman presents with outward signs of pregnancy, although she is not truly gravid. Commonly, women of lower socioeconomic status, limited access to health care, and feeling under significant stress to conceive are most at risk for this disorder. Although depression is a frequent comorbidity alongside pseudocyesis, endocrinologic disorders have been documented that mimic signs of polycystic ovary syndrome. This complex array of concerns requires an understanding of similar differentials and treatment options.

Keywords: factitious pregnancy, delusion of pregnancy, pseudocyesis, somatic disorder

BACKGROUND

When a woman presents with presumptive signs of pregnancy, pseudocyesis should be included in the differential, despite its rarity. According to the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*), pseudocyesis (or pseudocyesis vera) is a derivative of the Greek words, *pseudçs*, meaning "false," and *kyçsis*, meaning "pregnancy."[1,2] It is categorized under Somatic Symptom and Related Disorders, for debilitating mental health affliction leading to somatization.[1,3]

The medical literature has reported about 550 cases of pseudocyesis, with patients ranging in age from 6 to 79 years.[4] The majority of cases occur within the 20- to 44-year age group. In the Western world, the incidence is 1-6/22,000 births.[5]

The World Health Organization's Mental Health Action Plan emphasizes the importance of improving women's mental health, particularly when coupled with significant stress, poverty, and domestic abuse.[6] HealthyPeople 2020 estimates that 1 in 17 American adults suffer from mental illness.[7] Depression, which often underlies pseudocyesis, accounts for 4.3% of all diseases worldwide and is a leading cause of disability both globally and in the United States.[6,7] Major depression involves a 40%-60% increased risk for premature death, often as a result of additional poorly managed illnesses.[1,6]

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PRESENTATION

Pseudocyesis commonly presents outside of the mental health setting, with somatic manifestation of pregnancy, triggered by severe distress related to childbearing; for instance, recent miscarriage, infant loss, or an extreme fear of pregnancy. Low socioeconomic status, limited education, a history of infertility, relationship instability, and having an abusive partner are common features of the female with pseudocyesis.[1,2,5,8] Eighty percent of these patients are also married.[5] The condition manifests more frequently among younger women and within cultures placing great value on childbearing and motherhood.[1]

Considering these attributes, pseudocyesis is more common in underdeveloped regions of the world, but is certainly not isolated to those areas.[1] For instance, in Africa, its current incidence is relatively common, occurring in 1 of every 160 of infertility treatment patients, although historically the rate has been recorded as 1 in every 25 births. In developed countries, the incidence has decreased significantly over recent decades.[2,5] However, the African-American subculture maintains a greater predilection for pseudocyesis because of emphasis placed on fertility and motherhood.[1]

Populations with convenient health care access may be corrected early in the purported pregnancy using substantive evidence (eg, laboratory analysis, ultrasound) to the contrary.[1,5] Unfortunately, women with limited or no access may continue their "pregnancy," even through "labor."[1]

ASSESSMENT

In pseudocyesis, the patient history may reveal oligo- or amenorrhea, changes in appetite, nausea, weight gain, a sensation of fetal movement, breast enlargement or secretion, and even labor pain.[1,2,5] Symptoms may persist from a few weeks to beyond 9 months.[5]

At initial observation, the patient's posture may appear lordotic, and, during the physical assessment, darkened pigmentation may be noted on the face, abdomen, or around the areola. Abdominal distension is another common manifestation, but, upon further evaluation, several characteristics are quite different from true pregnancy. First, the umbilicus in pregnancy is typically everted, whereas, in pseudocyesis, the umbilicus remains inverted. Second, the abdomen is uniformly round, as opposed to a womb-favoring fetal lie. Finally, in pseudocyesis, abdominal palpation reveals a tight rubbery sensation, and percussion elicits tympany.[1,2,5,8]

To facilitate diagnosis, recall that the presumptive signs of pregnancy include abrupt-onset amenorrhea (at least 10 days after menses were due to begin), nausea and vomiting, breast tenderness and enlargement, urinary frequency, and fatigue (see Table). Probable signs, present on objective evaluation, include colostrum expression, and skin changes, such as cholasma, linea nigra, and abdominal striae. Not only will the abdomen appear enlarged, but the uterus is enlarged as well, with palpable and ballottable fetal parts (particularly apparent in the third trimester).[9] Other presumptive signs include Chadwick's sign (increased vascularity of ectocervix, which appears dark bluish-red), Hegar's sign (softening of the isthmus between cervix and uterus), Goodell's sign (cervical edema), palpable Braxton-Hicks contractions, a positive urine pregnancy test, and palpable fetal movement.[9,10] Serum human chorionic gonadotropin (hCG) is helpful in diagnosis as false-positive results are rare, but may occur in women who work extensively with animals, or have renal failure, a physiologic pituitary hCG, or an hCG-producing tumor (such gastrointestinal, ovary, bladder, or lung).[10] The only definitive signs of pregnancy to rule out pseudocyesis include fetal visualization via ultrasound or fetal heart rate auscultation by Doppler.[9,10] Around the sixth week of gestation, an embryo should be visualized via ultrasonography,[10] but, ultimately, sound clinical judgment must be employed when deciding on how long to continue testing for true pregnancy.

Table. Signs of Pregnancy

Presumptive & Probable	Definitive
• Abrupt-onset amenorrhea • Nausea/vomiting • Breast tenderness/enlargement • Urinary frequency • Fatigue • Colostrum production • Chloasma/linea nigra/abdominal striae • Abdominal enlargement • Chadwick's sign • Hegar's sign • Goodell's sign • Braxton-Hicks contractions • Palpable fetal parts/movement • Positive human chorionic gonadotropin	• Fetal visualization via ultrasound • Fetal heart rate auscultation via Doppler

Adapted from King et al.[9], confirmed by Cunningham et al.[10]

DIFFERENTIALS

An important differential diagnosis from pseudocyesis is *delusion of pregnancy*, which lacks physical signs of pregnancy. The *DSM-5* categorizes delusion of pregnancy under the schizophrenic spectrum and psychotic disorders, thus necessitating a very different treatment from that of pseudocyesis.[1,2] Two other differentials include *factitious* (or *deceptive*) *pregnancy* and *erroneous pseudocyesis*. A woman who consciously behaves as if pregnant for some gain (eg, sympathy, attention) is said to be experiencing a factitious pregnancy. On the other hand, if a presumptive or probable sign of pregnancy occurs (eg, amenorrhea or galactorrhea), *causing* a female to erroneously believe herself pregnant, it is considered an erroneous pseudocyesis.[1] Pathologic conditions precipitating erroneous pseudocyesis may include tumors, hydatidiform mole, ovarian cysts, uterine fibroids, ascites, urinary retention, and so forth, all of which must be ruled out in the absence of true pregnancy.[8,11]

PATHOPHYSIOLOGY

The diagnosis of pseudocyesis presents an interesting dichotomy: psychological insults from a person's behavioral and emotional state have been known to