Delusion of pregnancy for 21 years in an elderly woman: A case report and review of literature

Delusion of pregnancy (DOP) is a rare phenomenon especially in the elderly, with only 22 cases being reported. In this report, we present a case of a 74-year-old female with DOP and depressive disorder. In this case, a diagnosis of persistent delusional disorder was considered as the DOP persisted even after resolution of depressive symptoms with the use of antidepressants, antipsychotics, and electroconvulsive therapy.

In this background, we present a case of DOP in a 74-year-old female and review the existing literature on DOP among the elderly.

CASE REPORT

A 75-year-old married female presented to the inpatient unit with a history suggestive of severe depression with psychotic symptoms for the last 3 months. Evaluation of the history revealed that the patient had been suffering from acid peptic disease for 20 years. About 4 months before presentation, the patient developed myocardial infarction and underwent percutaneous coronary angioplasty. Within a month of myocardial infarction, the patient's gastrointestinal symptoms increased and she started to remain sad, developed anhedonia, poor interaction, poor

Keywords: Delusion of pregnancy, delusional disorder, depression

ABSTRACT

Delusion of pregnancy (DOP) is a rare phenomenon, which is mostly described in the form of case reports. A systematic review included 84 cases. This review highlights that the phenomenon is mostly seen in patients with schizophrenia (35.7%), followed by those with bipolar disorders (16.7%) and depression (9.5%). In most (79.8%) of the reports, patients reported existence of single fetus, and in about half (45.2%) of the cases, patients reported perceiving fetal movements. About two-third (64.3%) of the patients showed good response to the treatment received. In terms of age, about half (47.6%) of the reports were for patients aged 21–40 years and 28.6% of the patients were aged >50 years. In this review, only 15 cases belonged to patients aged >60 years. Three-fourth of the patients were females. Based on this evidence, it can be said that DOP is a rare phenomenon among the elderly.

CASE REPORT

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attention and concentration, low self-esteem, decreased sleep, and appetite, and had weight loss. She would be preoccupied with the abdominal complaints and report of something moving in her abdomen. She was taken to physicians, and whenever she would be examined, she would not allow the family members to accompany her, which family members found to be odd. When asked, she would say that she was too embarrassed to tell them the truth. On insistence of the family members, later, she disclosed that she was pregnant and was able to feel the movements of the baby in her abdomen. When asked further, she disclosed that she has been pregnant for 19 years. When family members tried to reassure her or reason with her, the patient would not be convinced and would express ideas of guilt. The patient was taken to a gynecologist, and even after examination, she was not convinced about lack of pregnancy. Following this, she was referred for psychiatric evaluation. There was no history suggestive of other depressive cognitions, first rank symptoms, free-floating anxiety, phobias, seizure, head injury, hypothyroidism, and substance use.

Her past history revealed evidence of a moderate depressive episode without somatic symptoms (as per the ICD-10) 10 years back, lasting for 6 months. Family history was not contributory.

Physical examination of the patient did not reveal any abnormality. Her body mass index was $22 \, \text{kg/m}^2$, and there was no evidence of any objective signs compatible with pregnancy. On mental status examination, she was found to have low mood, psychomotor retardation, ideas of guilt, and DOP. She disclosed that the fetus is present for the last 19 years and she is able to perceive the movements since then. Despite providing her scientific reasoning, she could not be convinced against the presence of pregnancy and it lasting for 19 years. Her mini mental status examination score was 27.

Routine investigations in the form of hemogram, renal function test, liver function test, serum electrolytes, and thyroid function test did not reveal any abnormality. Magnetic resonance imaging of the brain revealed mild cerebral atrophy with small vessel ischemic change, small ($0.5 \, \text{cm} \times 0.5 \, \text{cm}$) right temporal convexity meningioma. Her Beck depression inventory rating at the initial evaluation was 30.

Based on the available information, a diagnosis of recurrent depressive disorder, current episode severe with psychotic symptoms (F33.3), was considered. A possibility of independent persistent delusional disorder was also considered. Initially, she was managed with tablet sertraline 50–100 mg/day and tablet olanzapine 5–10 mg/day and was considered for electroconvulsive therapy (ECT) in view of marked distress in the patient. After detailed cardiology evaluation (electrocardiography, echocardiography, and stress scintigraphy – all of which were found to be within normal limit), she was started on ECT. She received six effective bitemporal modified ECTs, with which she showed significant improvement in her depressive symptoms. However, her DOP continued. In view of the same, independent diagnosis of persistent delusional disorder was confirmed. The delusional belief continues to remain as such, despite being on antipsychotics for 2 years, making the total duration of DOP to be 21 years.

**DISCUSSION**

DOP in the elderly is a rare phenomenon and it needs to be distinguished from pseudocyesis, which is also known as phantom pregnancy and is characterized by clinical features mimicking pregnancy. These clinical features may be in the form of distension of abdomen, breast enlargement, pigmentation of body, cessation of menses, morning sickness and vomiting, walking characterized by typical lordotic posture, inverted umbilicus, increased appetite, and weight gain. Index case did not have any of these features. In fact, the patient had history of poor appetite and weight loss in the recent times.

A review of literature suggests existence of data of 15 patients aged >60 years presenting with DOP. Another review, which looked at the prevalence of the same in the context of dementia, reported existence of data only in the form of case reports. In one of the first case series, authors presented five cases, of women aged 64 years, who presented with major depression with mood-congruent delusions. Another case series published in the same year included three cases of DOP, two of whom were diagnosed with dementia and one was diagnosed with affective disorder. In another case series, authors reported five cases of DOP, two of whom were diagnosed with Alzheimer’s dementia and three were diagnosed with affective disorder.

A search of literature after 2015 revealed publication of few more reports. One case series included five women aged 74–89 years, two of whom had dementia, two had delirium, and one patient had delirium superimposed on dementia. Only case of DOP in a male patient was reported from India, occurring in a 70-year-old male, suffering from depressive disorder. The delusional belief emerged after a homosexual encounter. A recent case report from India presented DOP in a 60-year-old female. She was diagnosed with persistent delusional disorder. Another case report reported DOP in a 70-year-old female with dementia.
Psychological and sociocultural factors have been implicated in the development of DOP. In the index case, the DOP was persistent for a period of 19 years before presentation, and no specific psychosocial factor could be identified, which could have led to the belief. Although many reports have presented DOP, DOP lasting for such long duration has been rarely reported. Among the various available case reports, DOP has been reported for as long as 18 years. Both these cases were diagnosed with delusional disorder, as was true for the index case. In the index case, the patient never reported about the delusional belief before the index presentation, neither did she voice the same in her previous depressive episode. Due to this, initially, it was thought that patient might be having retrospective falsification in reporting her symptoms. However, when the symptom persisted even after resolution of depression, her delusion was considered as a manifestation of delusional disorder.

To conclude, the present case highlights a rare phenomenon of DOP in an elderly woman and adds to the limited existing literature.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form, the legal guardian has given his consent for images and other clinical information to be reported in the journal. The guardian understands that names and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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