

A Rare Presentation of Delusion of Pregnancy and its Response to Modified Electroconvulsive Therapy

Tanmay Kumar Jha¹, Khyati Roy², Dheeraj Bhaskaran Nair³

Author's Affiliation:

¹DNB Resident, ³Head of Department, Department of Emergency Medicine, Max Super Speciality Hospital, Vaishali, Ghaziabad, Uttar Pradesh 201012, India. ²Junior Resident, Department of Psychiatry, Kasturba Medical College Hospital, Manipal, Karnataka 576104, India

Corresponding Author:

Tanmay Kumar Jha, DNB Resident, Department of Emergency Medicine, Max Super Speciality Hospital, Vaishali, Ghaziabad, Uttar Pradesh 201012, India.

E-mail: drtanmaykumarjha@gmail.com

Received on 05.02.2019,

Accepted on 06.03.2019

Abstract

Delusion of pregnancy is a special form of hypochondriacal / somatic delusion. High potency antipsychotics such as pimozide are indicated in the treatment of delusional disorder. However, the use of Modified Electroconvulsive Therapy (MECT) in delusional disorders has been reported infrequently. We report a case of a 38 years old female who presented to the department of Emergency Medicine and then later referred to the Department of Psychiatry. History and mental status examination in the Emergency Department revealed pre-morbid paranoid traits, bad obstetric history and significant interpersonal stressors with her only child and a delusion of pregnancy. A diagnosis of persistent delusional disorder (ICD10) was made. In view of significant hostility and acting out behaviour MECTS were initiated along with antipsychotic Pimozide. Serial evaluation of symptoms was done. The case highlights the successful encapsulation of a delusional belief with MECT and also discusses the psycho-social factors that might have contributed to the evolution of this delusion.

Keywords: Pseudocyesis; Modified Electroconvulsive Therapy (MECT); Delusion of pregnancy; Delusion Rating Scale (DRS); Brief Psychiatry Rating Scale (BPRS); ICD10.

Introduction

Delusion of pregnancy is a Delusional Disorder of Somatic Type. Somatic types of delusions include delusional belief that the subject has some general medical condition. Delusion of pregnancy has been reported in various psychotic conditions. It is mostly reported in cases of Schizophrenia and in mental disorders of organic etiologies; and recently in association with antipsychotic induced Metabolic Syndrome [1-3]. It is seen more commonly in male patients [3] (SIMS, 1988). The efficacy of MECT in treatment of these cases had not been studied. We report the first case of mono-symptomatic delusion of pregnancy that was successfully managed using one course of MECT along with antipsychotic drug.

Case Study

A 38-year old, married female, with pre-morbid paranoid personality traits, bad obstetric history (G5P2L1A3), with tubectomy done 14 years back, presented to the Emergency Department of our hospital saying that she was pregnant and was demanding for conduction of labor.

She had believed for a year now that she was pregnant with a male child and had consulted multiple doctors. Patient considered her body aches and abdominal distension as a proof of full-term pregnancy. She also believed her tubectomy was re-canalized 4 years back when in fact she had been operated for hernia. She refused to believe the negative ultra-sonography (USG) and urine pregnancy test (UPT) reports. She broke

into arguments her relatives in the emergency department when confronted after being told about the reports. Patient was unable to explain the duration of her belief being more than a year and disregarded her regular menstrual cycles as spotting.

Personal history revealed a strained interpersonal relationship with her husband and only child (daughter). She had expressed desires of having a male child for a long time and had reported feeling lonely and insecure.

Physical examination, neurological examination and baseline investigations (inclusive of CBC, blood sugar, LFT, KFT and thyroid functions) were within normal limits. Her BMI was 33 which suggested obesity. A diagnosis of persistent delusional disorder (ICD10) was made. Evaluation of symptoms was done using Brief Psychiatric Rating Scale (BPRS) and Delusion Rating Scale (DRS). Baseline scores on BPRS and DRS were 50 and 21 respectively.

Antipsychotic Pimozide was titrated to 6 mg/day. She continued to be irritable, demanding conduction of labor and showed aggressive behavior towards her husband and the treating team.

The patient's attendants wanted to take a second opinion and they took the patient to another hospital. In view of the significant hostility and acting out behavior, alternate day Modified Electro Convulsive Therapy (MECT) was initiated there. Serial evaluation of symptoms using BPRS and DRS was repeated after the 3rd, 6th, 9th and 11th MECT. Psycho-education and psychosocial intervention was carried out.

Table 1: Delusion Rating Scale (DRS)

	Baseline	6 th ECT	11 th ECT
Amount of Preoccupation	3	1	1
Duration of Preoccupation	3	2	2
Conviction at the Time of Interview	5	2	0
Amount of Distress	4	2	1
Intensity of Distress	3	2	0
Disruption of Life	3	2	2

Table 2: Areas that Showed Significant Change in Brief Psychiatric Rating Scale (BPRS)

	Base Line	6 th ECT	11 th ECT
Somatic Concern	4	3	1
Anxiety	5	3	2
Hostility	6	4	2
Suspiciousness	5	2	2
Total Scores	50	30	24

The patient showed significant response after the initial 6 MECTs and thereafter response showed a gradual plateau. At the end of 11th ECT there was a substantial reduction in her BPRS and DRS ratings and she did not spontaneously report the delusion and did not demand for conduction of labor.

Discussion

Pseudocyesis and pregnancy delusions develop more commonly in individuals who conceive procreation as a symbol of feminine fulfilment, who are embroiled into insecure relationships that are mostly characterized by dissatisfaction and an intense wish to be appreciated [4]. Patient under discussion seems to have many vulnerability factors, considering the acute stress of interpersonal conflicts laid over the ground of paranoid personality traits. Psychotherapy targeting family interventions, empathic attitude towards psychological conflicts, and production of evidence discarding the false belief in a graded manner is cornerstone of successful therapy in such cases. Therapy is more person-centred [5].

Historically MECT has not been considered an effective modality for treatment of delusional disorders and when used, a longer course of MECT is considered essential [6]. In 2012, a case of oral cenesthopathy (also a somatic delusion) successfully treated with MECT was reported, and altered regional cerebral blood flow was demonstrated before and after the treatment by single-photon emission computed tomography [7]. This hints at the probable mechanism of effectiveness of MECT in treatment of delusional disorders, and calls for further research in this direction [8]. So far, response of other delusions to MECT has not been reported. The response in this case of delusional pregnancy within 6 MECTs shows that MECT can prove to be therapeutically very effective in treatment of mono-symptomatic delusion of pregnancy and possibly other delusional disorders without a need to re-course to a prolonged treatment [8].

Conclusion

The response in this case of delusional pregnancy within 6 MECTs shows that MECT can prove to be therapeutically very effective in treatment of mono-symptomatic delusion of pregnancy and possibly other delusional disorders without a need to re-course to a prolonged treatment. A multi-team approach involving Emergency physicians, Obstetricians and Psychiatrists might be needed as proven in this case.

Obstetricians and Emergency physicians should keep an open mind and seek expert psychiatric help whenever a definitive diagnosis can not be made.

Source(s) of support: Oxford Textbook of Psychiatry, Google search engine, Institute's Library.

Conflicting Interest (If present, give details): There is no conflict of interest to declare. This article was written without any sponsorship and so the authors have no financial disclosures.

Open access: This article is open to all for noncommercial use, distribution, and reproduction in any medium provided the original authors and sources are credited.

References

1. Ahuja N, Moorhead S, Lloyd AJ, Cole AJ. Antipsychotic - induced hyperprolactinemia and delusion of pregnancy. *Psychosomatics*. 2008 Mar-Apr;49(2):163-7.
 2. Narayana, Manjunatha, Sahoo Saddichha. Delusion of pregnancy associated with antipsychotic induced metabolic syndrome. Case Report. *Indian J. Psychiat*. 1996;38(4):254-56.
 3. Shabaridutta, G.K. Vankar. Delusions of pregnancy - A report of four cases. *Encephale*. 2014 Apr; 40(2):154-9.
 4. Larner AJ. Delusion of pregnancy: a case revisited. *Behav Neurol*. 2013 Jan 1;27(3):293-4.
 5. Manjunatha N, Sarma PK, Math SB, et al. Delusional procreation syndrome: A psychopathology in procreation of human beings. *Asian J Psychiatr*. 2010 Jun;3(2):84-6.
 6. Rutherford M. Use of electroconvulsive therapy in a patient with chorea neuroacanthocytosis and prominent delusions. *J ECT*. 2012 Jun;28(2):e5.
 7. Parker G, Roy K, Hadzi-Pavlovic D, et al. Psychotic (delusional) depression: a meta-analysis of physical treatments. *J Affect Disord*. 1992 Jan;24(1):17-24.
 8. Meyers BS. Geriatric delusional depression. *Clin Geriatr Med*. 1992 May;8(2):299-308.
-