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New-Onset Obsessive–Compulsive Disorder After Hysterectomy

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ABSTRACT

Hysterectomy is the surgical removal of the uterus, a procedure that affects the patient's psychological equilibrium and makes her more vulnerable to multiple psychiatric disorders. We present the case of a 52-year-old woman who underwent hysterectomy due to dysfunctional uterine bleeding. One day after her hysterectomy, she became very concerned about urinary incontinence. This concern grew in intensity, and she accordingly developed several cleaning rituals. These cleaning rituals significantly impaired her functionalities. With time, her obsessive-compulsive disorder (OCD) symptoms intensified and began to involve multiple situations. She scored 26 on the *Yale-Brown Obsessive-Compulsive Scale* (*Y-BOCS*), which indicates moderate OCD. Thereafter, she was started on 20 mg of fluoxetine/day. Many possible explanations for the development of OCD following hysterectomy have been suggested. The featured case underscored the importance of timely psychiatric diagnosis and treatment following gynecological surgeries that affect the female equilibrium.

1. INTRODUCTION

Hysterectomy is one of the most common gynecological surgeries with a prevalence of 10.4% [12]. The uterus constitutes a major symbol of femininity and its loss leads to significant sexual and emotional dysfunctions. In addition, hysterectomy has been shown to increase vulnerability to multiple psychiatric disorders such as depression, anxiety, insomnia, agitation, and psychosomatic disorders [9], [7], [2]. It is worth mentioning that survivors of critical illness are known to be at increased risk of developing of post-traumatic stress disorder (PTSD) [6], [5]. An observational prospective study conducted by Casarin and colleagues showed that hysterectomy was associated with non-negligible risk of PTSD, with a rate of 16.4% [3].

An obsessive-compulsive disorder (OCD) is characterized by obsessions, including fear of contamination by dirt or germs, generating distress that frequently results in compulsions to temporarily alleviate anxiety [4], [7].

In addition, individuals with OCD often identify psychosocial stress as a factor that exacerbates their symptoms, and many trace the onset of symptoms to a stressful period of life or a discrete traumatic incident

[1]. One of the stressors that could precipitate the development of OCD is hysterectomy. However, there is a dearth of studies specifically addressing the development of OCD after hysterectomy. Herein, we report the case of a patient who developed OCD symptoms after she underwent a hysterectomy.

2. Case Presentation (From 15 July 2021 to 15 September 2021)

A 52-year-old married woman with five children works as a director of a charitable organization. The patient was not known to have any past psychiatric illness and was in her usual state of mental health until she underwent a hysterectomy due to dysfunctional uterine bleeding.

One day after her hysterectomy, she became very concerned about urinary incontinence. This concern grew in intensity, and she accordingly developed several cleaning rituals, including excessive washing of her thighs and genitals, as well as using multiple towels to dry herself. These behaviors led to severe cracking and bleeding in those areas. She attempted to control her thoughts but could not successfully do so. She also felt extremely anxious.

These behaviors continued to intensify over the next several weeks. At some point, she began to avoid touching doors due to fear of contamination.

Several weeks later, the patient began experiencing intense fear of contamination every time she walked over a sewer cover. During such incidents, she would return home to change her clothing.

The patient could no longer trust her own judgment and regularly sought reassurance from her family. As a result of these worsening symptoms, her functions at home and work were severely compromised. She also regularly missed her work obligations. The patient denied any family history of OCD. Apart from dysfunctional uterine bleeding, the patient denied any history of chronic medical diseases.

Notably, the patient refused the pharmacotherapy offered during her first consultation because she was concerned about psychotropic medications and the possibility of becoming dependent on them. After providing reassurance and conducting an extensive discussion of all the risks and benefits of medications, she agreed to start taking fluoxetine at an initial dose of 20 mg/day. Behavioral therapy was suggested, but the patient was not willing to start it at this time (Figure 1).

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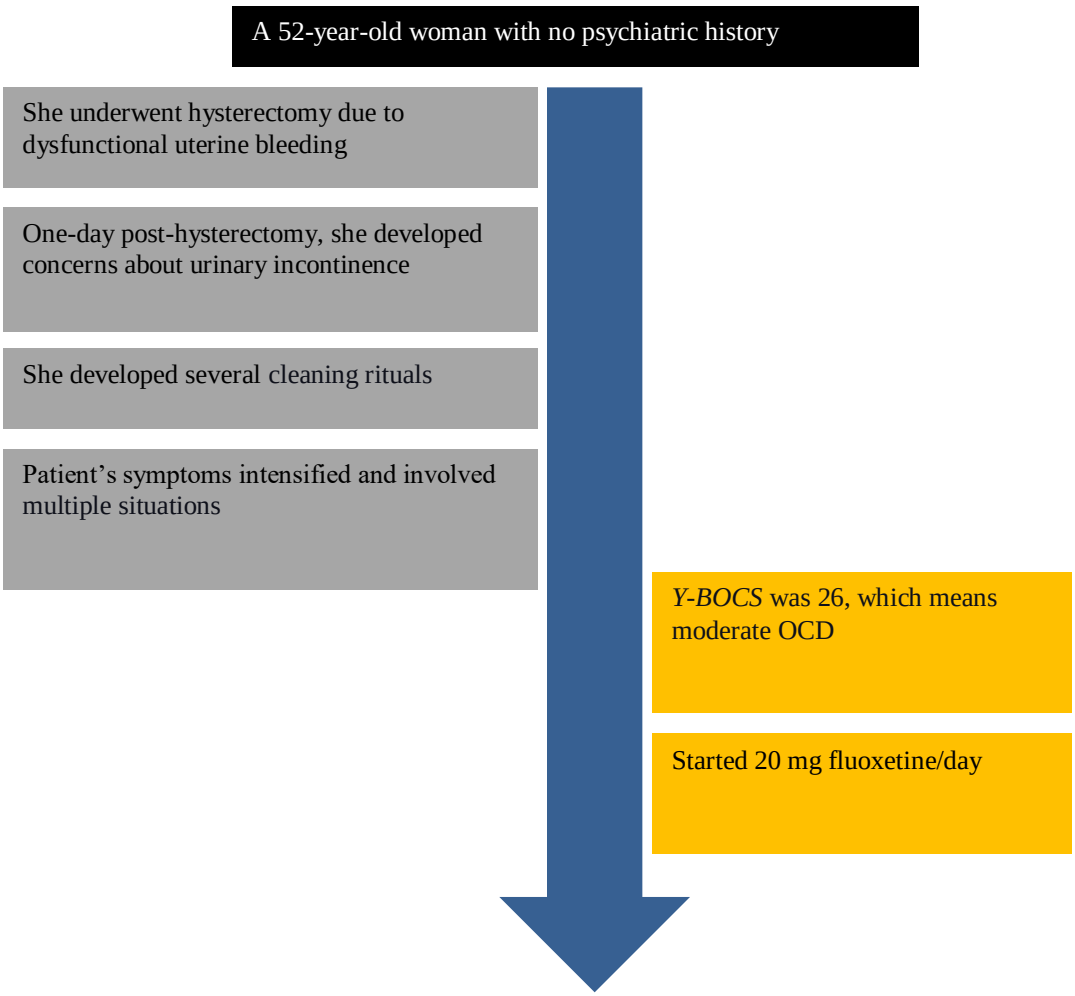

Figure 1: Timeline of the patient's condition

2.1 Measures

We used the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) [5], a clinician-rated scale used to assess the severity of OCD symptoms. Each of the ten items is rated from 0 (no symptoms) to 4 (extreme symptoms), with a total score ranging from 0 to 40. Obsessions and compulsions each account for up to half of the total score. Ratings are based on the time spent on the obsession or compulsion, perceived distress level, and degree of interference caused [5].

3. Results

This patient's Y-BOCS score was 26. The ratings were based on the patient's reports of obsessions and compulsions.

3.1 Brief Mental Status Examination

Appearance and behavior: A middle-aged woman with an average body built and average nutritional state sat on the chair. She was well dressed and her clothing was socio-culturally accepted. There were no abnormalities in her posture and movements. There were also no abnormalities in her social and motor behaviors. Rapport was established with difficulty since she constantly asked questions such as "Am I clean?" and had to be answered immediately.

Mood and affect: The patient was in "an anxious" mood, and the affect was congruent with evidence of

anxiety.

Speech: Her speech was normal in rate, rhythm, flow, tone, and volume.

Thought disorders: Obsessions and compulsions were present, but there were no other thought abnormalities.
Perception: There were no perceptual abnormalities.

Cognition: She was alert, and her cognition was grossly intact with respect to orientation, attention, and memory.

Judgment and insight: Intact.

4. Discussion

This is a case report of a new-onset OCD in a 52-year-old woman associated with hysterectomy. The hysterectomy seemed to be the most plausible catalyst for the onset of OCD symptoms in this patient.

Many studies have examined the effects of hysterectomy on mental health [9], [7], [2]. The research conducted by D.H. Richards reported that several distressing symptoms commonly follow hysterectomy [2]. In his study, 70% of the hysterectomy patients manifested postoperative depression, and about half exhibited anxiety symptoms [9]. Another study addressed the risk of different psychiatric disorders, showing that OCD after hysterectomy has a prevalence of 3.8% [11]. However, it was carried out 3 to 6 months after the hysterectomy, which means other factors could have been at play in the development of OCD. In our case, the patient developed new-onset OCD just days after the hysterectomy.

The removal of the major pelvic organ in hysterectomy and its associated nerve supply alters the gating sensation of the bladder and the muscles and the connective tissues of the pelvic floor [8]. This alteration constitutes a risk factor of urinary incontinence, reported in up to 38% of patients [13]. This urinary incontinence could have been a precipitating factor in the development of OCD in our patient. As her intrusive thoughts about urinary incontinence grew, her behaviors became more severe, disruptive to her life, and present in new situations.

Another possibility is that there are inherited genetic variants and early life behavioral factors that put women at risk for multiple gynecological symptoms, which eventually result in hysterectomy and independently predispose the women to develop an anxiety disorder [14]. This possibility may be applicable to our patient, as some common features are shared by anxiety and OCD.

Nevertheless, it is important to consider the risk of development of mental health disorders associated with bilateral oophorectomy in which there is a direct endocrine effect after the surgery [10]. A study has shown that ovarian function may decline after hysterectomy, and there may be ovarian damage unrelated to ovarian reserve [15]. This hypothetical decline in ovarian function could explain the development of OCD in our patient.

5. Conclusions

The featured case underscored the importance of timely psychiatric diagnosis and treatment following gynecological surgeries that affect the female equilibrium. The cause in this case remains a matter of speculation. Additional cases are needed to determine whether or not OCD symptoms are associated with hysterectomy. Finally, prospective studies of OCD associated with hysterectomy will help shed light on the

predisposing and etiological factors involved in such cases.

Availability of data and material
Data supporting the findings of this study are available from the author [HA] on request.

Conflict of interest
The author has no conflicts of interest to declare.

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Ethical Approval:
Ethical approval cleared by ethic committee of College of Medicine, Qassim University, Saudi Arabia (Ethic code No. EDRAK-CR-131057860, 17/8/2021)

Consent
The patient and her husband provided consent to publish the case details. The consent form (signed by the patient and her husband) is in Arabic. Should the Journal require it, the consent form will be tendered along with its English translation.

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