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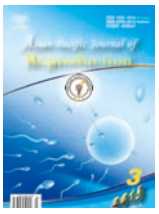

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Attempted self-removal of Implanon®: A case report

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ABSTRACT

A 34-year old woman with Affective Bipolar Disorder attempted self-removal of an impalpable Implanon® from her arm with a pair of non-sterile implements, resulting in an infected and swollen arm. The device was removed after ultrasound imaging without any complications. This instance is useful for enhancing cognizance of the possibility of self-removal of contraceptive implants and the need for specific follow-up arrangements and timely appointments when a patient requests removal. It also underscores the need for a detailed history, including elucidation of past and current medical problems, in all women requesting contraception guidance.

1. Introduction

The single-rod Etonogestrel subdermal implant is an effective reversible contraceptive method with a failure rate of 0.5%[1]. It is much easier to insert and remove than the 6-rod levonorgestrel implant but requires trained healthcare providers[2,3]. Side effects include irregular vaginal bleeding, headache, weight gain, emotional lability and depression[2]. Intolerability of side effects, failure to find a qualified provider, or reluctance to go to one at an opportune time, may engender attempts at self-removal of the device; an exceedingly rare occurrence.

2. Case report

A 34-year-old woman suffering from bipolar affective disorder attended for removal of an impalpable Etonogestrel implant in her left upper arm. The Implant had been inserted five months earlier by her healthcare provider. She had gone back a month later with severe mood swings precipitated by an adverse domestic situation and a feeling that the Implant had worsened her psychiatric disorder. The combined situation, coupled with her not coping well with the severe mood swings, had instigated her to attempt removal of the device with a pair of scissors and a screwdriver. Examination of her left upper arm had shown a very swollen and infected arm with multiple stab wounds around her perceived location of the implant. She had been treated with antibiotics and follow-up a few weeks later had shown that the infection and swelling had subsided. Two months later, following an improvement in her domestic situation, she requested removal of the implant in order to get pregnant. Examination of her left upper arm showed the healed scars of the attempted self-removal, but the implant was not palpable. Ultrasound imaging revealed the implant to lie in the subcutaneous fat at a depth of 6mm below the skin surface at its proximal end and 3 mm below the skin surface at its distal end. Following discussion about removal of the device and informed consent, the device was removed under local anaesthetic, using the "U" technique[3,4] without any complications. Discussion about her future method of contraception took place, but she declined using any because she was no longer in a relationship. However, she was well aware of the need to use an effective contraceptive method if and when she commenced a new relationship.

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3. Discussion

The luxury of Long-acting reversible contraception (LARC) methods is the ease of use for the patients. It has thus become increasingly popular, with the potential to reduce unintended pregnancy rates significantly.[1] The Etonogestrel sub-dermal implant, a single-rod LARC, is easier to insert and remove than the 6-rod levonorgestrel implant.[5,6] However, side effects include irregular vaginal bleeding, headache, weight gain, emotional lability and depression[2]. Inability to tolerate side effects can negatively impact continuation rates. Continuation rates in the United Kingdom (UK), range from 84% to 89% at six months and 67% to 78% at one year[7,8], The most common reasons for removal before three years of use were bleeding problems and mood swings[8]. One disadvantage of contraceptive implants is the need for trained healthcare providers to insert and remove them. Self-surgery (performance of a surgical procedure on oneself), can be an act taken in extreme circumstances out of necessity. It can also be undertaken in an attempt to avoid embarrassment or legal action, or as a rare manifestation of a psychological disorder.[9] When the side effects of an Etonogestrel implant become intolerable, failure to find a qualified provider, or reluctance to go to one at an opportune time, may instigate attempts at self-removal. While reports of self-surgery exist in the literature, with a significant number having mental disorders[10–12], there is only one case of successful self-removal of an Etonogestrel Contraceptive implant[13]. In that instance, the woman resorted to self-removal because of mood swings, prolonged menstruation lasting for ten days, bloating, depression, weight gain, inability to cope with the side effects and an inability to get an early appointment for removal. However, in her case, it was not reported that she had a history of psychiatric disorder.

Emotional lability and depression are documented but uncommon side effects of using progestin-only subdermal contraceptive implants. However, such side effects may be less well-tolerated by women with pre-existing mental disorders. Such situations underscore the need for obtaining a detailed history including elucidation of past and current medical problems, in all women presenting for contraception advice and discussion of all suitable forms of reversible and permanent contraception. This single instance can be used to enhance cognizance of the possibility of self-removal of contraceptive implants and the need for specific follow-up arrangements and timely appointments when a patient requests removal. However, it cannot and should not be used to make a sweeping generalization of contraception guidance and selection in patients with psychiatric disorders. Patients with contraindications to pregnancy including sub-optimized medical and psychiatric problems are most in need of effective contraception, which includes the Etonogestrel implant. To withdraw this form of contraception as an option in patients with mental disorders would be counterproductive to prevention of unintended pregnancies.

This case is useful for enhancing cognizance of the possibility of attempts at self-removal of contraceptive implants and the need for specific follow-up arrangements and timely appointments when a patient requests removal. It also underscores the need for a detailed history, including elucidation of past and current medical problems, in women requesting contraception guidance.

Conflict of interest statement

Dr. Gbolade has received from Organon Laboratories Ltd; financial support to attend conferences and sponsorship of lunch for delegates attending our Diploma of the Faculty of Sexual and Reproductive Healthcare (DFSRH) theoretical courses.

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