

# Self-Removal of Implanted Contraceptive During an Exacerbation of Paranoid Schizophrenia

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There is an interplay between psychiatric disorders and their treatment and obstetric/gynecologic disorders and their treatment. This case highlights the need to consider the potential risk of an implantable contraceptive in women of childbearing age with a primary psychotic disorder outside of the typical pharmacodynamic and pharmacokinetic considerations.

## Case Report

A 24-year-old woman was admitted for an exacerbation of longstanding schizophrenia precipitated by antipsychotic medication noncompliance. She presented with disorganized behavior, disorganized speech, auditory and visual hallucinations, and prominent bizarre persecutory and paranoid delusions. In the emergency department, the patient revealed she used a knife to cut a 7-cm by 6-cm circle around her contraceptive etonogestrel implant and successfully removed it. She reported guarded, conflicting, and fragmented reasons for removal, such as “too promiscuous” and “I need to get married and get pregnant,” with fear and urgency although she was without a romantic partner. She reported feeling “better, less promiscuous” after removing the implant. The patient was intermittently perseverative on pregnancy and promiscuity during admission and exhibited related disorganized behavior to include making phone calls declaring she was not pregnant. She was restarted on aripiprazole, which had previously been effective, and transitioned to the long-acting injectable formulation to improve adherence. Once stabilized on aripiprazole, the patient reported she regretted removing the etonogestrel implant herself. Although she improved throughout her hospitalization, she continued to experience treatment-resistant positive psychotic symptoms, including delusions, at the time of discharge to placement in a community behavioral health hospital. The treatment

team recommended follow-up with a primary care doctor or obstetrician-gynecologist to address her contraceptive options. The patient did not pursue care within our health system, and, unfortunately, her follow-up contraceptive care plan is unknown.

## Discussion

Long-term contraception may be an ideal option in vulnerable populations, including women with psychotic disorders. There are 3 reports of self-removal of etonogestrel implants,<sup>1–3</sup> and no known report of a psychotic individual attempting or succeeding in self-removal of an implanted medical device, including contraception. There are 5 case reports of individuals attempting suicide via removal of implanted cardiac devices; however, none were psychotic.<sup>4–8</sup> Delusions involving implanted medical devices have been reported,<sup>9</sup> and severe self-harm in actively psychotic patients has been described.<sup>10</sup> Actively psychotic individuals may have a propensity for delusions involving implanted medical devices, posing a safety risk. Providers must weigh risks and benefits of contraceptive options and recognize the potential for self-removal by psychotic patients.

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