

# Rare adverse reaction to Nexplanon

## Background

- Nexplanon is a progestin-only, rod-shaped implant that is placed subdermally in the upper arm to provide long-acting, reversible contraception.
- Effective for up to 5 years, FDA-approved for 3 years for contraceptive purposes
- Commonly reported side effects include: irregular menstrual bleeding, mood disturbances, weight gain, headaches, acne, and lower abdominal pain.
- Infectious or allergic reactions to Nexplanon implants are exceptionally rare.

## Case Description

- A 23-year-old G1P1 with a past medical history of stage 1A mucinous borderline ovarian tumor presented in clinic for removal of her Nexplanon implant site 42 days after standard placement due to concerns for possible reaction or infection.
- Of note, the patient had utilized Nexplanon previously for 3 years without encountering a similar reaction.
- The patient was experiencing escalating pain and discomfort at site of Nexplanon. However, she denied any systemic signs of infection.
- Upon inspection, the implant site was not fully healed. Implant itself was readily visible and protruding from the skin. Approximately 75% of the implant was no longer subdermal. There was also granulation tissue and erythema of the skin around the implant site.
- Implant was removed without complication.
- Clindamycin 300 mg three times daily for 7 days for empiric antimicrobial coverage was prescribed.
- Medroxyprogesterone acetate (Depo Provera) injection was initiated for contraceptive management.
- A swab of the implant was sent for bacterial culture, which revealed heavy growth of Methicillin Resistant Staphylococcus Aureus susceptible to clindamycin.
- At a follow up visit a week later, the wound showed signs of improvement and scab formation with no erythema or discharge.
- Patient will be followed up with in clinic in 3 months to monitor for continued improvement.

## Images



**Figure 1.** Nexplanon site with evidence of infection



**Figure 2.** Nexplanon site 1 week after treatment

## Discussion

- This case highlights a rare case of an adverse reaction to Nexplanon.
- There are only a few case reports in the existing literature detailing infections or allergic reactions to Nexplanon implants.
- Due to this, there is limited information regarding the presentation and management of infectious or allergic complications following implant placement.
- While these events are uncommon, it remains crucial for healthcare providers to identify and manage such instances to prevent severe complications in the future.

## Conclusion

- We will continue to follow-up with this patient for continued improvement and monitor for similar reactions.
- Further investigation of patients with Infectious or allergic reactions to Nexplanon implants could implicate a need to enhance the safety protocol to minimize infection risks.

## References

- Reed S, Do Minh T, Lange JA, Koro C, Fox M, Heinemann K. Real world data on Nexplanon® procedure-related events: final results from the Nexplanon Observational Risk Assessment study (NORA). *Contraception*. 2019 Jul;100(1):31-36. doi: 10.1016/j.contraception.2019.03.052. Epub 2019 Apr 10. PMID: 30980829.
- Chaudhry F. Adverse reaction to Nexplanon(R) 2013/06/20 ed. *J Fam Plann Reprod Health Care* 39. 2013. p. 231-2. 2013/06/20 ed.