

Levonorgestrel Rod Implants (formerly known as NORPLANT® II Implants)

Q.1. How long may one use levonorgestrel rod implants?

Recommendations	Rationale
<p>As of this writing, levonorgestrel rod implants have been approved by the US Food and Drug Administration for a period of three years of continuous use (and may well be extended beyond three years).</p> <p>Over a period of three years of continuous use, two women per 1000 users of the levonorgestrel rod implants would become pregnant because of a method failure (three year pregnancy rate of 0.2 per 100 women).</p>	<p>Two recent studies on the levonorgestrel rod implants reported no pregnancies in 798 women who used the implants for three years.</p> <p>No data has been published on the current formulation of levonorgestrel rod implants beyond three years of use, thus the current recommendation is for three years of use.</p> <p>However, there are some data based on blood levels of levonorgestrel, that suggest the duration of effectiveness for levonorgestrel rods may be longer than three years.</p> <ol style="list-style-type: none">1) Sivin I, Lahteenmaki P, Ranta S, Darney P, Klaisle C, Wan L, et al. Levonorgestrel concentrations during use of Levonorgestrel Rod (LNg Rod) implants. <i>Contraception</i> 1997;55(2):81-5.2) Sivin I, Viegas O, Campodonico I, Diaz S, Pavez M, Wan L, et al. Clinical performance of a new two-rod levonorgestrel contraceptive implant: a three-year randomized study with Norplant implants as controls. <i>Contraception</i> 1997;55(2):73-80.

Q.2. Apart from any differences in the effective duration of use, what is the principal advantage of the levonorgestrel rod implants over NORPLANT® Implants?

Recommendations	Rationale
<p>Because there are only two rods to be placed and removed with the levonorgestrel rod implants, the placement and removal procedures take less time than the same procedures for NORPLANT® Implants.</p>	<p>The levonorgestrel rod implants are a set of two 43mm rod implants as compared with the six capsules required for the NORPLANT® Implants. It has been shown that the mean time required for removal of the two rod contraceptive is significantly shorter than the mean time required to remove NORPLANT® Implants. Overall, the mean time required to remove the levonorgestrel rod implants is about half the time needed to remove NORPLANT® Implants.</p> <p>1) Sivin I, Viegas O, Campodonico I, Diaz S, Pavez M, Wan L, et al. Clinical performance of a new two-rod levonorgestrel contraceptive implant: a three-year randomized study with Norplant implants as controls. <i>Contraception</i> 1997;55(2): 73-80.</p>