

Neuroendocrine mechanism of anovulation in users of contraceptive subdermal implant of nomegestrol acetate (Uniplant)

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Objective: To evaluate a nomegestrol acetate subdermal contraceptive implant's (Uniplant; Thermex, Monaco) effect on the hypothalamus-pituitary- ovarian axis. **Design:** A prospective clinical trial. **Setting:** San Borja- Arriaran Clinical Hospital, University of Chile, School of Medicine. **Patient(s):** Normally cycling healthy women. **Intervention(s):** Insertion of Uniplant. **Main Outcome Measure(s):** Luteinizing hormone pulse and endocrine profiles were assessed before, 48 hours after insertion, and after prolonged use of the implant. **Result(s):** Anovulation was noted in 100% of users in the first month. Seventy percent of subjects demonstrated follicular development with the absence of ovulation and an endocrine profile similar to the follicular phase: (LH pulse/8 hours 6.85 ± 0.67 , LH amplitude 3.54 ± 0.65 mIU/mL (conversion factor to SI unit, 1.00), and E2 193 ± 29.4 pg/mL (conversion factor to SI unit, 3.67), whereas 30% demonstrated no follicular activity with an endocrine profile similar t