

A Prospective Study of the Impact of Levonorgestrel Intrauterine Devices on Sexual and Bladder Health

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Background/Objective: Intrauterine devices (IUDs) are highly effective and safe methods of contraception, but concerns grow over their impact on women's bladder and sexual health. Oral contraceptives (OCPs) have been found to decrease androgen levels in women and can cause bladder dysfunction. Due to the local effects of progesterone from the IUD near the bladder, it is reasonable to propose that similar bladder dysfunction seen in women taking OCPs may be experienced by women with levonorgestrel-IUD (Lng-IUDs). When it comes to women's sexual health, the literature is mixed on the true side effect profile of IUDs.

Methods: Using a prospective study design, women aged 18-45 from gynecologic centers at Indiana University opting for a Lng-IUD were recruited. Women within 6 months postpartum, still breastfeeding, or undergoing IUD replacement were excluded. Participants completed standardized REDCap questionnaires pre-placement and at 3- and 6- months post placement to assess sexual function and lower urinary tract symptoms using Female Sexual Function Index and Urinary Distress Inventory, Short Form.

Results: 11 participants have been recruited and filled out baseline surveys thus far: 81.8% with Mirena placed and 18.2% with Kyleena. Indications for Lng-IUD placement included contraception, irregular or painful menses, menorrhagia, or abnormal bleeding. 50% reported no frequent urination, and 20% no pain or discomfort with urination. 9.1% reported being very satisfied with their overall sexual life over the past 4 weeks and 36.4% reported being moderately satisfied. Participants will continue to be recruited and will receive 3- and 6- month post-IUD questionnaires.

Conclusion: Few prospective studies in the United States explore the side effect profile of IUDs on sexual health, and international data are inconsistent. In addition, no studies investigate the impact of IUDs on bladder dysfunction. Going forward, we will utilize patient surveys to help make informed reproductive decisions.