Uterine or paracervical lidocaine application for pain control during intrauterine contraceptive device insertion: a meta-analysis of randomised controlled trials (Review)

Abstract

Objective: Systematic review and meta-analysis to assess the effects of uterine or paracervical lidocaine application on pain control during IUD insertion.

Methods: PubMed and five other electronic research databases were searched through 15 November 2017 for RCTs comparing lidocaine treatment vs. a control (placebo or no intervention) to prevent pain during IUD insertion. Searched terms included ‘IUD insertion’, ‘lidocaine’ and ‘randomised controlled trial’. RCTs evaluating lidocaine treatment before IUD insertion without restriction of language, age and IUD type. Pain measured by visual pain scales at tenaculum placement, IUD insertion and immediate post-IUD insertion.

Results of random effects meta-analyses were reported as mean differences (MDs) of visual pain scale (VPS) scores and their 95% confidence intervals (CIs). Results: Eleven RCTs (n = 1458 women) reporting paracervical lidocaine block or uterine mucosa lidocaine application before IUD insertion. Lidocaine produced lower VPS scores during tenaculum placement (MD −0.99, 95% CI: −1.73 to −0.26), IUD insertion (MD −1.26, 95% CI: −2.23 to −0.29) and immediate post-IUD insertion period (MD −1.25, 95% CI: −2.17 to −0.33).

Conclusion: Lidocaine treatment was associated with modest reduction of pain during tenaculum placement and after IUD insertion. © 2018, © 2018 The European Society of Contraception and Reproductive Health.
Reaxys Database Information

Author keywords

Genital pain intrauterine contraceptive device IUD insertion levonorgestrel intrauterine system lidocaine pain visual scale prilocaine

Indexed keywords

EMTREE drug terms: lidocainelidocaine plus prilocaine placebo
EMTREE medical terms: analgesia comparative effectiveness controlled study endometrium female genital pain visual analog scale

Chemicals and CAS Registry Numbers:

lidocaine, 137-58-6, 24847-67-4, 56934-02-2, 73-78-9; lidocaine plus prilocaine, 101362-25-8

- **ISSN:** 13625187
- **CODEN:** ECRCF
- **Source Type:** Journal
- **Original language:** English

- **DOI:** 10.1080/13625187.2018.1469124
- **Document Type:** Review
- **Publisher:** Taylor and Francis Ltd