

High-dose ibuprofen may reduce post-procedural pain following IUD insertion: an observational study across reproductive and sexual health clinics in Queensland, Australia

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Background:

Non-steroidal anti-inflammatory drugs (NSAIDs) are widely used for pain management during intrauterine device (IUD) insertion. Little is known about optimal dosing, despite established high-dose NSAID use in similar gynaecological contexts such as medical termination of pregnancy. This study aimed to compare the pain and satisfaction of those undergoing IUD insertion with standard (400mg) ibuprofen, high-dose (1600mg) ibuprofen, and 550mg naproxen.

Methods:

A prospective, observational, pre-post survey of clients presenting to five private sexual and reproductive health clinics in Queensland, Australia. The survey was offered to all clients undergoing IUD insertion, with respondents categorised by NSAID type and dose.

Results:

A total of 78 patients were included: 400mg ibuprofen (n=39), 1600mg ibuprofen (n=26), and 550mg naproxen (n=13). Baseline characteristics were similar across groups. Adjunct analgesia use was significantly higher in the 400mg ibuprofen group, namely paracetamol (p=0.002) and local anaesthetic spray or gel (p=0.043). There were no significant differences between groups for worst procedural pain (p=0.572), satisfaction (p=0.183), or likelihood to recommend analgesia (p=0.675). However, 1600mg ibuprofen was associated with significantly lower post-procedural pain than 400mg ibuprofen (p=0.015), with a trend towards lower pain than 550mg naproxen (p=0.060). No significant differences in side effects were observed. Across both ibuprofen groups, patients significantly overestimated anticipated pain (400mg p<0.001; 1600mg p=0.003).

Conclusion:

This observational study demonstrates a potential role for the use of high-dose ibuprofen in managing post-procedural IUD insertion pain, despite no significant difference in worst procedural pain between groups. Patients in this study consistently overestimated procedural pain, suggesting pre-procedural counselling may be useful to address procedural anxiety. Findings are limited by sample size and study design. Further research in the form of a randomised controlled trial is required to substantiate our findings.

Disclosure of Interest Statement:

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