

Pregnancy Outcomes in Women with Fibroids Treated with Ulipristal Acetate (UPA), Myomectomy or Uterine Artery Embolisation (UAE): A Systematic Review

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ABSTRACT

Introduction: Uterine fibroids are the most common benign tumours of the pelvis in women of reproductive age. Fibroids are associated with infertility and a higher risk of spontaneous abortion. **Objectives:** To compare the different treatment modalities of fibroids with regards to pregnancy outcomes. **Methods:** ScienceDirect, PubMed, Web of Science and Cochrane Library databases were thoroughly searched using the key words "ulipristal acetate, myomectomy, uterine artery embolism, fibroid, leiomyoma, leiomyomata, pregnancy, infertility, pregnancy loss, IVF". Only primary research from 2000 to July 2018 were included. Articles were extracted by two independent reviewers using PRISMA guidelines. **Results:** The articles analysed in our study included three randomised controlled trials, three cohort studies, 31 observational studies, 11 case series and reports after UPA (31 women), myomectomy (1647 women) and UAE (390 women) therapy. Clinical pregnancy rate was highest in women post-myomectomy (52%) followed by post-UPA (41%) and post-UAE (40%). Highest live birth rate was seen after myomectomy (76%) then UPA (60%) and UAE (58%). Pregnancies post-UAE showed the highest number of miscarriages (34%). **Conclusions:** Our study shows that myomectomy remains the gold standard for the treatment of leiomyomata in women who intend for pregnancy. However, UPA and UAE are possible alternatives in women who are contraindicated for surgery.

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Ultrasound Guidance versus the "Blind Method" for Intrauterine Catheter Insemination: A Randomised Controlled Trial

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ABSTRACT

Objective: The primary objective of this study was to compare clinical pregnancy rates in intrauterine insemination (IUI) treatment cycles with transabdominal ultrasound guidance during intrauterine catheter insemination (US-IUI) versus the "blind method" without ultrasound guidance (BM-IUI). The secondary objective was to compare whether US-IUI had better patient tolerability and whether US-IUI made the insemination procedure easier for the clinician to perform compared to BM-IUI. **Method:** This was a randomised controlled trial done at the Reproductive Medicine Unit, General Hospital Kuala Lumpur, Malaysia. We included women aged between 25 and 40 years who underwent an IUI treatment cycle with follicle-stimulating hormone injections for controlled ovarian stimulation. **Results:** A total of 130 patients were recruited for our study. The US-IUI group had 70 patients and the BM-IUI group had 60 patients. The clinical pregnancy rate was 10% in both groups ($p > 0.995$) and there were no significant between-group differences in patient tolerability assessed by scores on a pain visual analogue scale ($p = 0.175$) or level of difficulty for the clinician ($p > 0.995$). The multivariate analysis further showed no significant increase in the clinical pregnancy rate (adjusted odds ratio, 1.07; 95% confidence interval, 0.85-1.34; $p = 0.558$) in the US-IUI group compared to the BM-IUI group even after adjusting for potential covariates. **Conclusion:** The conventional blind method for intrauterine catheter insemination is recommended for patients undergoing IUI treatment. The use of ultrasound during the insemination procedure increased the need for trained personnel to perform ultrasonography and increased the cost but added no extra benefits for patients or clinicians.