

The shrinking challenge: Evaluation of ultrasound-guided microwave ablation for the treatment of uterine fibroids

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ABSTRACT

Introduction: Uterine fibroids are the most common benign pelvic tumours in women with lifetime prevalence of 30%. Its incidence and prevalence increase with age during the reproductive years. Management options are affected by the woman's age, symptoms, desire to conceive and local resources. Microwave ablation offers a minimally invasive alternative treatment options, with faster recovery rate and fewer complications. This study aimed to evaluate the feasibility and effectiveness of ultrasound-guided microwave ablation for the treatment of uterine fibroids. **Materials and Methods:** Patients who underwent microwave ablation of fibroids at a single centre between May 2022 to December 2023 were prospectively studied to compare the volume and reduction rate of fibroids at 3, 6 and 12 months after ablation and their reintervention rate. **Results:** There was a total number of 52 patients (77 leiomyomas) with an average age of 45.5 years were involved in this study. The pre-ablation mean diameter of the myomas ranged from 2.1 to 13.8 cm (mean of 5.3 cm) and the volume ranged from 6.1 to 1366.1 cm³ (mean of 115.2 cm³). The mean reduction rate was 48.5%, 50.1% and 52.4% at 3, 6 and 12-months post-ablation respectively. The reintervention rate was 15.6% for those who completed 12-months follow-up. **Conclusions:** This study has provided valuable insight into the effectiveness of microwave ablation, demonstrating promising results in terms of fibroids volume reduction and improvement in clinical symptoms.