03. Clinical Outcomes Following Uterine Artery Embolisation for Uterine Fibroids: A Retrospective Cohort Study

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BACKGROUND: Uterine artery embolisation (UAE) is an established minimally invasive treatment for symptomatic uterine fibroids, offering uterine preservation and shorter recovery compared to surgery. Ongoing evaluation of real-world outcomes remains important to inform patient counselling and clinical decision-making. This study aimed to evaluate clinical outcomes following UAE for symptomatic uterine fibroids, focusing on complications, reintervention rates, and symptom improvement. **METHODS:** A retrospective single-centre cohort study was conducted at a tertiary maternity hospital, including women of reproductive age who underwent UAE for symptomatic fibroids between November 2021 and December 2024. Data were extracted from electronic medical records. Primary outcomes were peri-procedural complications, classified using the modified Society of Interventional Radiology classification system for complications, and reintervention rates. Secondary outcomes included clinician-documented improvement in menstrual symptoms. Descriptive statistics were used, with exploratory comparisons between baseline characteristics and complications. **RESULTS**: A total of 114 patients were included (mean age 45.5 ± 5.9 years). The mean largest fibroid diameter was 9.2 ± 3.5 cm. Menorrhagia was the most common presenting symptom (79.5%). Median follow-up was 119 days (IQR 2–334). Complications were reported in 18/112 patients (17%); including pain (n=4), post-embolization syndrome (n=3), fibroid expulsion (n=3), and infection and one case of sepsis (n=3). Rare complications included one case of small bowel obstruction and fistula formation, respectively. Reintervention occurred in 6/114 patients (5.3%) during follow-up. Among patients with available data (n=59), menstrual symptom improvement was documented in 44 (74.6%), while 15 (25.4%) had persistent symptoms. No significant associations were observed between complication occurrence and fibroid size, number, or patient age (all p>0.05). **CONCLUSION:** UAE demonstrated a favourable short-term safety profile, with low complication and reintervention occurrences and meaningful symptom improvement. These findings support UAE as an effective minimally invasive treatment for symptomatic fibroids. However, interpretation is limited by missing data, short and variable follow-up, and lack of standardised symptom assessment.

Key Words: Leiomyoma; Uterine Neoplasms; Uterine Artery Embolization; Postoperative Complications

Table 1. Peri- and post-procedural complications following UAE (n = 112)

Complications	n (%)
Any complication	18 (16.0%)
Post-embolisation syndrome	3 (2.7%)
Pain	4 (3.6%)
Fibroid expulsion	3 (2.7%)
Urinary incontinence	2 (1.8%)
Infection (including sepsis)	3 (2.7%)
Bleeding	3 (2.7%)
Small bowel obstruction	1 (0.9%)
Fistula formation	1 (0.9%)