

## Comparative Effects of Vaginal Bromocriptine and Dienogest in Women with Adenomyosis: A Randomized Clinical Study

**Samaneh Rokhgireh**

Iran University of Medical Science, Iran

**Parvane Bahoozahi**

Iran University of Medical Science, Iran

**Soheila Aminimoghaddam**

Iran University of Medical Science, Iran

**Roya Derakhshan**

Iran University of Medical Science, Iran

**Neda Hashemi**

Iran University of Medical Science, Iran

### Abstract:

**Objective:** Adenomyosis is characterized by the presence of endometrial glands and stroma within the myometrium, commonly presenting with pelvic pain and heavy menstrual bleeding. This study aimed to compare the clinical effects of vaginal bromocriptine and oral dienogest in women with adenomyosis.

**Method:** In this randomized, double-blinded, controlled trial, patients diagnosed with adenomyosis at Rasul-e- Akram Hospital were assigned to two groups: Group A received vaginal bromocriptine, and Group B received oral dienogest. Evaluations included transvaginal ultrasonography (TVS), the visual analog scale (VAS) for pain, and the pictorial blood loss assessment chart (PBLAC). Assessments were performed at baseline and at 3, 6, and 9 months post-treatment.

**Results:** At 3 and 6 months post-intervention, the bromocriptine group showed significantly lower mean PBLAC scores compared to the dienogest group ( $P < 0.001$ ). In contrast, the dienogest group reported significantly lower menstrual pain intensity at 3 months ( $P < 0.001$ ). Both groups demonstrated notable improvement in TVS findings by the 6-month follow-up.

**Conclusion:** Both vaginal bromocriptine and oral dienogest were effective in reducing menstrual bleeding, pelvic pain, and sonographic abnormalities in women with adenomyosis, with each showing particular advantages in different outcome measures.

### Keywords:

Adenomyosis, Dienogest, Bromocriptine, Menstrual bleeding, Pelvic pain, Transvaginal ultrasonography.