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Study on the Causes and Clinical Treatment Methods of Irregular Vaginal Bleeding in Obstetrics and Gynecology

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Abstract: Objective: To analyze the causes and clinical treatment methods for abnormal vaginal bleeding (AVB) in obstetrics and gynecology. **Methods:** A total of 74 patients with obstetrics and gynecology AVB admitted to our hospital from August 2023 to August 2024 were selected for this study. The causes of AVB were analyzed, and the patients were divided into a control group (37 cases) receiving conventional treatment and an observation group (37 cases) receiving combined treatment with oral anti-inflammation tablets by random number table method. The clinical efficacy of both groups was compared. **Results:** Among the 74 AVB patients, 24.32% had intrauterine devices (IUDs), 18.92% had ovarian tumors, 14.86% had endometrial cancer, 13.51% had endometriosis, 12.16% had reproductive tract infections, 9.46% had uterine fibroids, and 6.76% were classified as other causes. The treatment efficacy in the observation group was significantly higher than that in the control group, while the incidence of adverse reactions, the amount of bleeding, and the duration of bleeding were significantly lower in the observation group ($P < 0.05$). **Conclusion:** Analyzing the causes of obstetrics and gynecology AVB and incorporating Kang gong yan Pian into the treatment can enhance efficacy and expedite hemostasis, making it worthy of promotion.

Keywords: Obstetrics and gynecology; abnormal vaginal bleeding; causes; Kang gong yan Pian

Abnormal vaginal bleeding (AVB) is a common issue in obstetrics and gynecology. Besides menstrual periods, it involves irregular bleeding from the female reproductive system, characterized by increased flow and persistent bloody discharge. The bleeding may originate from the cervix, vagina, fallopian tubes, and other areas, with various causes including intrauterine lesions and pregnancy-related factors. Patients with significant

AVB often seek timely medical attention, but those with minimal bleeding due to malignancies may experience early AVB without noticeable symptoms, leading to delays in diagnosis and treatment, which can have severe consequences^[1]. Timely implementation of appropriate therapies is crucial for improving AVB prognosis. Analyzing the causes of AVB and conducting comprehensive examinations while providing foundational therapies—such as using anti-



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inflammatory and hemostatic medications, along with oral drugs—can accelerate hemostasis, reduce bleeding, ensure patient safety, and yield significant results^[2]. This study focuses on AVB patients in obstetrics and gynecology, analyzing the causes and treatment measures, with the following results.

1. Materials and Methods

1.1 General Information

A total of 74 patients with obstetrics and gynecology AVB admitted to our hospital from August 2023 to August 2024 were included in the study. The patients were randomly divided into two groups: the control group (37 cases, ages 40-60, average age 52.33±4.29 years) and the observation group (37 cases, ages 41-61, average age 52.41±4.18 years). There were no significant differences in general information between the two groups ($P > 0.05$).

Inclusion criteria: Patients hospitalized in obstetrics and gynecology; diagnosed with AVB; normal cognitive function; complete data; informed consent obtained. Exclusion criteria: Presence of cardiovascular or cerebrovascular diseases; mental disorders; communication barriers; bleeding due to trauma or systemic diseases.

1.2 Methods

The control group received conventional treatment: analysis of AVB causes, routine gynecological examinations, and provision of basic treatments such as cervical scraping and vaginoscopy. The causes of AVB were explored through clinical segmentation, and targeted, differentiated measures were implemented, including the selection of anti-inflammatory and hemostatic medications and the execution of curettage as necessary. The treatment duration was 2 months.

The observation group received combined treatment with oral Kang gong yan Pian (CR Sanjiu; National Medicine Approval No. Z43020330): 5 tablets per dose,

taken orally 3 times daily, avoiding any medications that may interact with the tablets. The treatment duration was also 2 months.

1.3 Observation Indicators

The causes of AVB were analyzed for the 74 patients, including intrauterine devices (IUDs), ovarian tumors, endometrial cancer, endometriosis, reproductive tract infections, uterine fibroids, and other causes^[3]. Treatment efficacy was evaluated as follows: significant efficacy was defined as normalization of menstrual bleeding with little to no AVB; effective was defined as a generally regular menstrual cycle with decreased bleeding and occasional AVB; ineffective was defined as no improvement or worsening of AVB^[4]. Vaginal bleeding was assessed by measuring the volume and duration of bleeding in both groups. Adverse reactions were also evaluated, including gastrointestinal reactions, allergies, and dizziness or headaches^[5].

1.4 Statistical Methods

Data were processed using SPSS 28.0. Measurement and count data were expressed as $\bar{x} \pm s$ and (%), respectively, and analyzed using t and χ^2 . $P < 0.05$, the difference was statistically significant

2. Results

2.1 Analysis of Causes of AVB in 74 Patients

Among the 74 patients with AVB, the causes included IUDs (24.32%), ovarian tumors (18.92%), endometrial cancer (14.86%), endometriosis (13.51%), reproductive tract infections (12.16%), uterine fibroids (9.46%), and other causes (6.76%).

2.2 Comparison of Treatment Efficacy Between Groups

The treatment efficacy was significantly higher in the observation group compared to the control group ($P < 0.05$). Detailed results are presented in **Table 1**.

Table 1. Comparison of Treatment Efficacy Between Groups [$n(\%)$]

Group	Cases	Significant Efficacy	Effective	Ineffective	Efficacy Rate (%)
Observation	37	27	9	1	97.30
Control	37	18	11	8	78.38
χ^2	/	/	/	/	6.198
P	/	/	/	/	0.013

2.3 Comparison of Vaginal Bleeding and Safety Between Groups

The observation group showed significantly lower rates

of adverse reactions, bleeding volume, and bleeding duration compared to the control group ($P < 0.05$). Detailed results are presented in **Table 2**.

Table 2. Comparison of Vaginal Bleeding and Safety Between Groups [$n(\bar{x}\pm s)/(\%)$]

Group	Cases	Vaginal Bleeding Conditions		Adverse Reactions			
		Bleeding Volume (mL)	Bleeding Duration (min)	Gastrointestinal Reactions	Allergy	Dizziness/Headache	Incidence (%)
Observation	37	28.46±3.64	4.13±1.14	1	0	1	5.41
Control	37	52.64±4.63	9.98±1.25	4	2	4	27.03
t/x^2	/	26.289	22.141	/	/	/	6.366
P	/	0.000	0.000	/	/	/	0.012

3. Discussion

The incidence of AVB is high, with various bleeding locations, including the uterus and vagina. Observing AVB requires comprehensive examinations to formulate a diagnosis and treatment plan. The factors contributing to AVB are diverse, including damage to the vulva, uterine cavity, and vagina, and cover types such as contraceptive-related bleeding and endocrine bleeding, each with different pathogenic causes and treatment options. Therefore, it is crucial to promptly identify the etiology of AVB and implement targeted therapies^[6].

Research results indicate that among 74 AVB patients, 24.32% had intrauterine devices (IUDs), 18.92% had ovarian tumors, 14.86% had endometrial cancer, 13.51% had endometriosis, 12.16% had reproductive tract inflammation, 9.46% had uterine fibroids, and 6.76% fell into other categories. This illustrates that the causes of AVB in obstetrics and gynecology are diverse, primarily including: ① IUDs: Improper placement can cause injury, leading to increased menstrual flow. ② Ovarian tumors: These can lead to hormonal secretion abnormalities and subsequently trigger AVB. ③ Endometrial cancer: This condition often causes purulent blood with a foul odor. ④ Endometriosis: Common issues include adenomyosis and uterine fibroids, which disrupt endocrine function and damage ovarian tissue. ⑤ Reproductive tract inflammation: For example, uterine or fallopian tube inflammation. ⑥ Uterine fibroids: AVB caused by this condition typically manifests as prolonged and increased menstrual bleeding. ⑦ Others: Such as dysfunctional AVB and ectopic pregnancy-related AVB^[7].

Currently, there are various diagnostic methods in obstetrics and gynecology, commonly including: ① Routine physical examinations: General checks, such as thyroid enlargement and respiratory assessment, along with gynecological examinations that routinely screen for AVB. ② Complete blood count tests: Evaluating coagulation function and analyzing blood cell counts to assess disease conditions. Endocrine tests analyze hormone secretion to identify any abnormalities. ③ Imaging examinations: Utilizing ultrasound to observe for lesions in the uterus and ovaries; employing CT scans to monitor pelvic changes and identify their nature. ④ Pathological tests to identify ovarian lesions early and clarify tumor characteristics. ⑤ If necessary, hysteroscopy may be performed. Based on AVB manifestations, classifications include: ① Increased menstrual flow with a regular cycle, potentially caused by adenomyosis, functional uterine bleeding, or uterine fibroids. IUDs may also lead to increased menstrual flow. ② Persistent vaginal bleeding, usually caused by malignant tumors, including cervical cancer. ③ In reproductive-aged women, may indicate pregnancy-related issues like miscarriage; in postmenopausal women, often suggests malignancy. ④ Bleeding after sexual intercourse, potentially due to cervical cancer or cervical erosion. ⑤ AVB accompanied by leukorrhea, often resulting from advanced cervical cancer. ⑥ Paroxysmal AVB, typically caused by primary tubal cancer. ⑦ Menstrual bleeding that occurs between two periods, lasting about 4 days, with generally low volume, classified as ovulatory bleeding. ⑧ Spotting during menstruation with discharge a few days before and after, typically linked to ovarian dysfunction, possibly due to endometriosis. ⑨ Light bleeding

with slight discharge, appearing brown, lasting about 3 days with mild lower back pain. From a Western medicine perspective, this is considered menstrual bleeding due to estrogen abnormalities, where the endometrium lacks hormonal support, leading to shedding and AVB. ⑩ AVB during menstruation, either prolonged or excessively light or heavy, mostly falls under functional uterine bleeding; treatment often involves rapid hemostatic methods and menstrual regulation. Anemia may influence some patients, leading to delayed periods with bleeding lasting up to 10 days; monitoring menstrual flow and color is essential. If abdominal pain occurs with variable bleeding, the cause may be an ectopic pregnancy. Individuals experiencing vaginal bleeding should seek timely examination to check for reproductive tract inflammation and undergo regular check-ups. Cytological techniques can facilitate early identification of cervical cancer, while CT and ultrasound can detect ovarian tumors and uterine fibroids. The demographic most affected by endometrial cancer is elderly women, especially those with underlying conditions or obesity. Upon detecting AVB, it may be necessary to exclude endometrial cancer through dilation and curettage. Those with dysmenorrhea should be actively managed to prevent endometriosis. Maintaining personal hygiene during menstruation and avoiding sexual intercourse is recommended to prevent AVB.

For confirmed AVB, conventional treatment methods such as anti-inflammatory and hemostatic therapies are typically applied. These treatments can temporarily stop the bleeding. However, long-term use of antibiotics may lead to side effects, with high recurrence rates after discontinuation. Recurrent AVB can lead to hemorrhagic shock, reducing overall effectiveness. When conventional treatment is combined with KangGongYan Pian (an herbal medicine), which includes ingredients like Aconite, Motherwort, and *Callicarpa Kwangtungensis*, treatment outcomes improve. KangGongYan Pian has the effect of nourishing blood, stopping bleeding, eliminating stasis, and clearing heat. The main ingredient, *Callicarpa Kwangtungensis*, serves as the sovereign herb with detoxifying and stasis-dissolving effects. With Motherwort and Aconite as minister medicine, the former can regulate menstruation and promote blood circulation, the latter can play the role of dispelling cold

and warming kidney, regulating Qi and relieving pain. These three herbs work together to provide hemostatic, analgesic, and warming effects. KangGongYan Pian is highly stable, rapidly absorbed by the body, and has high bioavailability. The treatment effectiveness of the observation group was significantly higher than that of the control group ($P < 0.05$), indicating that the combination of KangGongYan Pian enhances efficacy and improves the condition. The adverse reaction rate, bleeding volume, and bleeding duration in the observation group were significantly lower than those in the control group ($P < 0.05$), demonstrating that the addition of KangGongYan Pian improves drug safety, rapidly stops bleeding, and reduces bleeding volume. This confirms that clarifying the causes of AVB in obstetrics and gynecology and supplementing conventional treatment with KangGongYan Pian can improve AVB prognosis. AVB has multiple causes, including cervical tumors, IUDs, and other factors. Timely treatment, combined with conventional therapies and oral medications, can rapidly improve the condition, effectively stop bleeding, and ensure safety, resulting in a favorable prognosis.

In summary, integrating KangGongYan Pian into the treatment of gynecological AVB significantly strengthens efficacy and promotes rapid hemostasis, making it a valuable approach worth widespread adoption.

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