Informed Consent Form

Study Title: Prospective Observational Study on Hysteroscopy for Termination of Early- Stage Pregnancy Complicated with Intrauterine Adhesions

Version No.: 1.0

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Dear Subject,

You are invited to participate in the clinical research entitled *Prospective Observational Study on Hysteroscopy for Termination of Early- Stage Pregnancy Complicated with Intrauterine Adhesions*, which has been reviewed and approved by the Clinical Research Ethics Committee of Women's Hospital, Zhejiang University School of Medicine.

This Informed Consent Form introduces the background, objectives, methodology, expected duration, and planned sample size of this study. Please read it carefully before making your decision on participation. While the research staff explains and discusses this form with you, you may raise questions at any time and request clarification for any items you do not understand. You may also discuss this decision with your family, friends, or your treating physician.

Your participation in this research is entirely voluntary. Your decision will not affect your routine medical care and benefits at this hospital.

1. Study Background

Intrauterine adhesion (IUA) refers to a syndrome of partial or complete uterine cavity occlusion caused by injury to the basal layer of the endometrium from various triggers. It is main clinical manifestations include decreased menstrual volume, recurrent miscarriage, and infertility. Intrauterine surgical procedures are the leading cause of IUA. The incidence of intrauterine adhesions after induced abortion is relatively high and rises with increasing curettage times.Hysteroscopic adhesiolysis is the primary treatment for intrauterine adhesions; nevertheless, postoperative recurrence

rates are substantial, with higher recurrence for more severe adhesions. IUA has become a major disorder impairing reproductive health in women of child- bearing age. For patients desiring future pregnancy, severe adhesions may require repeated adhesiolysis procedures, greatly compromising women's physical and mental well- being.When terminating pregnancy complicated with intrauterine adhesions, structural distortion of the uterine cavity and gestational sac coverage by adhesion bands may result in incomplete abortion, retained products of conception, failed abortion, or uterine perforation, which may necessitate repeat surgery. This increases surgical trauma as well as psychological and financial burdens for patients. Meanwhile, some patients with IUA still have fertility demands and require management of adhesions.Hysteroscopy enables direct visualization for removal of intrauterine pregnancy tissue, lowering risks of residual tissue and re- operation. It also allows concurrent management of pre- existing intrauterine adhesions. Post- operative anti- adhesion measures may restore uterine cavity architecture and endometrial function, improve subsequent fertility outcomes, and reduce psychological stress as well as time- related and economic costs from subsequent hospital admissions for intrauterine adhesion interventions.

2. Study Objectives

Through clinical comparative research, this study aims to evaluate the clinical outcomes and advantages of hysteroscopy for termination of early- stage pregnancy complicated with intrauterine adhesions combined with simultaneous adhesiolysis, so as to generate reliable clinical evidence for decision- making in this patient population. In addition, decidual tissue will be examined via immunohistochemistry. Analyses of immune cell subsets, inflammatory markers, and vascular remodeling markers will provide further reference for clinical management of this condition.

3. Study Methodology and Content

This is a prospective, single- center, randomized, non- inferiority controlled study designed to assess the efficacy and safety of hysteroscopy for termination of early- stage pregnancy complicated with intrauterine adhesions.

Subjects will choose surgical procedures on a voluntary basis and be assigned to two groups:

- **Study Group**: Hysteroscopic induced abortion combined with hysteroscopic adhesiolysis
- **Control Group**: Ultrasound- guided induced abortion

Abortion and hysteroscopic operations will be performed following standard clinical protocols. Data to be collected include intraoperative blood loss, severe complications (massive hemorrhage, uterine perforation, water intoxication, etc.), intrauterine device placement, postoperative estrogen administration, ultrasound follow- up for residual tissue and adhesion status, and fertility outcomes within 2 years post- operatively.

Adopting a non- inferiority design, this study complies with FIGO guidelines and ethical requirements to generate high- quality evidence for clinical decision- making.

4. Expected Study Duration

September 1, 2025 - August 31, 2028

5. Planned Number of Subjects

A total of 180 subjects will be enrolled in the Study Group and another 180 in the Control Group.

6. Inclusion, Exclusion, Withdrawal and Termination Criteria

(1) Inclusion Criteria

1. Early- stage pregnancy (normal or abnormal fetal development), **gestational age ＜14 weeks**
2. Ultrasound evidence of intrauterine adhesions, or prior history of hysteroscopic adhesiolysis with clinical suspicion of intrauterine adhesions
3. Scheduled for either hysteroscopic surgery or ultrasound- guided induced abortion
4. Postoperative ultrasound follow- up available at this hospital, with ultrasound results at 3 months or later
5. Absence of severe systemic diseases

(2) Exclusion Criteria

1. Ectopic pregnancy (e.g., cornual pregnancy, cesarean scar pregnancy)
2. Concurrent surgical management of other intrauterine lesions (e.g., polyps, adenomyosis, uterine septum), except for cervical canal procedures
3. Medical abortion for pregnancy termination
4. Abnormal postoperative pathological findings (e.g., hydatidiform mole, gestational trophoblastic neoplasia)
5. No intrauterine adhesions identified during hysteroscopy

(3) Withdrawal Criteria

Investigator- initiated withdrawal

Enrolled subjects shall be withdrawn from the study by investigators when continuation is deemed inappropriate:

1. Disease progression during study participation precluding further participation
2. Severe adverse events during the study jeopardizing subject safety
3. Poor adherence to study protocol compromising data reliability

Subject- initiated withdrawal

Subjects may withdraw from the study at any time. Subjects who discontinue study- related treatment and follow- up without explicit withdrawal notification will be recorded as lost to follow- up. Reasons for withdrawal or loss to follow- up shall be documented.

(4) Study Termination Criteria

Overall study termination means premature closure of the whole trial before scheduled completion, implemented primarily to protect subject rights and ensure data quality:

1. Major protocol deviations occur, or study data cannot be used for efficacy evaluation
2. Termination is requested by study funders, institutional administration or regulatory authorities

3. Unforeseeable safety risks emerge during study conduct

(5) Exclusion of Enrolled Cases

Already- enrolled subjects who should not have entered the study will be excluded from analysis under the following circumstances (non- exhaustive):

1. Misdiagnosis or failure to meet inclusion criteria
2. Protocol violations compromising data integrity
3. No study intervention administered or no evaluable data available

Reasons for exclusion shall be documented, and all original source data shall be retained for archiving.

7. Potential Risks and Mitigation Measures

(1) Study- related Risks

This is an observational clinical study and imposes no additional therapeutic interventions or associated risks on participants. Decidual specimens collected are clinical medical waste and will cause no harm to subjects. All postoperative follow- up examinations are routine clinical tests; no extra examinations or additional testing frequency will be imposed.

(2) Risk Mitigation Measures

To minimize risks and safeguard subject rights, the research team has implemented the following protections:

1. This study has obtained ethics committee approval. All protocols and amendments require ethical review prior to implementation.
2. All physicians and operators involved have received ethics training and possess adequate clinical experience.
3. Any adverse reactions or adverse events occurring during the study will be managed by specialized clinicians, documented, and reported to the ethics committee in a timely manner.

4. All study- related information will be kept strictly confidential; subject data will be identified only by coded study numbers to protect privacy.

8. Expected Benefits

You may not obtain direct long- term health benefits from participating in this study. Potential short- term personal benefits include: for subjects desiring future fertility in the hysteroscopy group, simultaneous hysteroscopic adhesiolysis may improve intrauterine conditions, enhance fertility potential, and decrease the need for repeat adhesion- related surgery, thus alleviating psychological distress and financial burden. Participation allows you access to additional information regarding your health status and pre- operative assessment. If this study validates the efficacy of the intervention, future patients with comparable conditions may benefit from optimized surgical protocols.

Societal benefits include generation of evidence- based clinical data for surgical decision- making in early- stage pregnancy complicated with intrauterine adhesions, facilitating safer and more effective surgical strategies for this patient population.

9. Alternative Treatment

This is an observational study with no extra therapeutic interventions. Only decidual tissue (medical waste) will be collected. No alternative study- specific treatment applies.

10. Costs and Compensation

This is an observational study. Participation incurs no additional examinations or medications for subjects, and therefore no extra costs. No compensation will be provided for study participation.

11. Compensation and Management for Study- related Harm

If you sustain health- related injury during study participation, please notify the research staff (Juan Yu,

+86- 15167147558).Necessary medical treatment will be provided promptly, and compensation will be administered in accordance with current national laws and regulations.

12. Confidentiality

If you agree to participate, all personal study- related information will be kept confidential. Biospecimens, forms and other research records will be labeled with study identification codes rather than your real name. Identifiable personal information will not be disclosed to personnel outside the research team unless you provide explicit permission. All research team members and study sponsors are bound by confidentiality obligations. Authorized representatives from regulatory authorities or the ethics committee may access your source data for study oversight purposes. No personal identifiable information will be published in study outputs.

13. Voluntary Participation

Participation is entirely your choice. You may decline to join, or withdraw from the study at any time by notifying investigators. Your data will not be included in study analyses, and your standard medical care and entitlements will not be adversely affected.

Investigators may discontinue your study participation in your best interest, for example if you require alternative treatment, fail to comply with study procedures, sustain study- related harm, or other circumstances interfere with study execution.

14. Subject Responsibilities

- Provide truthful information regarding your medical history and current physical condition.
- Report any new discomfort experienced throughout study participation to study physicians.
- Inform study physicians if you are participating or have recently participated in other clinical research.

15. Contact Information

You may request updates on study- related information and progress at any time. Please contact Juan Yu at +86- 15167147558 for study- related questions, adverse events or concerns regarding research participant rights.

For inquiries concerning your research subject rights, you may contact the Clinical Research Ethics Committee of Women's Hospital, Zhejiang University School of Medicine: Tel: 0571- 89998819.

Signature Page of the Informed Consent Form

Statement of Consent

I have carefully read this Informed Consent Form. I have had opportunities to ask questions, and all my questions have been fully answered. My participation in this clinical research is voluntary. I understand I may refuse participation or withdraw at any time upon notification to investigators without penalty, and my medical care and entitlements will remain unaffected.

Investigators may terminate my participation for valid reasons including need for alternative diagnosis/treatment, non- compliance with study protocol, or other reasonable grounds.

I will receive a signed copy of this Informed Consent Form.

Subject's Full Name (Printed): _____ Subject's Signature: _____

Contact Information: _____ Date: _____ /_____ /_____ (Year / Month / Day)

Investigator's Statement

I have accurately informed the subject of the content of this Informed Consent Form and answered all the subject's questions. The subject participates in this clinical research voluntarily.

Investigator's Full Name (Printed): _____Investigator's Signature: _____

Contact Information: _____ Date: _____ /_____ /_____ (Year / Month / Day)