

# Retrospective analysis of the medical records of large cervical fibroids

<b>Submission date</b> 22/11/2024	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 25/01/2025	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 13/01/2025	<b>Condition category</b> Pregnancy and Childbirth	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Large cervical fibroids are non-cancerous growths in the uterus that can cause symptoms like heavy bleeding, pain, and frequent urination, significantly affecting women's quality of life. This study investigates how preoperative factors, such as age, weight, and symptoms, influence recovery outcomes after surgery for large cervical fibroids. The goal is to improve recovery times and guide personalized care for future patients.

### Who can participate?

Women aged between 18 to 65 years with fibroids larger than 8 cm and complete clinical data

### What does the study involve?

The study reviews medical records of 152 patients treated between 2018 and 2022. It compares recovery outcomes such as hospital stay, pain levels, and complications between those who had laparoscopic surgery and open surgery, alongside analyzing their preoperative health data.

### What are the possible benefits and risks of participating?

As this is a retrospective observational study, there are no direct benefits or risks to participants. However, the findings may help improve surgical planning and recovery care for future patients.

### Where is the study run from?

Women's Hospital School of Medicine Zhejiang University, China

### When is the study starting and how long is it expected to run for?

Data collection covering surgeries performed from 2018 to 2022

### Who is funding the study?

Natural Science Foundation of Zhejiang Province, China

### Who is the main contact?

Dr Xiaoyong Li, [lixiaoyongdyx@zju.edu.cn](mailto:lixiaoyongdyx@zju.edu.cn), China

## Contact information

## Type(s)

Public, Scientific, Principal investigator

## Contact name

Dr Xiaoyong Li

## ORCID ID

<https://orcid.org/0009-0004-7425-1491>

## Contact details

Women's Hospital, School of Medicine, Zhejiang University

Hangzhou

China

310006

+86-15990131962

Lixiaoyongdyx@zju.edu.cn

## Additional identifiers

## Study information

### Scientific Title

The impact of preoperative physiological indicators on postoperative recovery time and rehabilitation outcomes in patients undergoing surgery for large cervical fibroids

### Study objectives

The hypothesis of this study is that preoperative physiological indicators significantly influence postoperative recovery time and rehabilitation outcomes in patients undergoing surgery for large cervical fibroids. Specific preoperative factors such as age, BMI, gravidity, and urinary frequency are expected to correlate with critical postoperative recovery metrics, including:

Duration of hospital stay,

Pain levels (measured by VAS scores),

Time to first mobilization,

Complication rates.

The study proposes that these indicators could help predict recovery outcomes and guide individualized surgical planning and postoperative management, optimizing recovery speed and minimizing complications

### Ethics approval required

Ethics approval required

### Ethics approval(s)

approved 25/08/2022, Ethics Committee of Women's Hospital School of Medicine Zhejiang University (1 Xueshi Road, Lakeside Shangcheng District, Hangzhou, 310000, China; +86-0571-89992355; zjpwzh@zju.edu.cn), ref: IRB-20220280-R

### Study design

A retrospective cohort study

## **Primary study design**

Observational

## **Study type(s)**

Quality of life

## **Health condition(s) or problem(s) studied**

Large cervical fibroids

## **Interventions**

This study does not involve active interventions as it is observational.

### **Participants and Study Design**

This retrospective cohort study included 152 patients who underwent surgery for large cervical fibroids ( $\geq 8$  cm) at a single hospital from 2018 to 2022. Patients aged 18 to 65 years with complete clinical data were enrolled. Exclusion criteria included severe comorbidities, pregnancy, malignant uterine tumors, or incomplete clinical records.

### **Intervention and Follow-up**

**Preoperative Assessment:** Patients underwent medical evaluations, including ultrasound, blood tests, and physiological assessments (e.g., age, BMI, gravidity, parity, urinary symptoms) before surgery.

**Surgery:** Patients underwent either open myomectomy or laparoscopic myomectomy, with the surgical method selected based on clinical judgment. Surgery-related data (duration, blood loss, fibroid count, and transfusions) were recorded.

**Postoperative Care:** Patients were monitored for pain (VAS score), mobilization time, time to first flatus, and complications. Blood tests were repeated to track changes in biochemical markers (e.g., Hb, WBC, NEU%, CRP).

### **Observation and Follow-up Period**

**Total Observation Time:** From hospital admission to discharge, with a median hospital stay of 5.5 days (IQR 4-6 days).

**Total Follow-up Time:** Follow-up continued throughout the hospital stay until discharge, during which postoperative recovery indicators were monitored.

## **Intervention Type**

Other

## **Primary outcome(s)**

The following primary outcome measures are assessed using data collected in medical records at one timepoint:

1. Postoperative hospital stay duration measured in days
2. Time to first mobilization measured in hours
3. Postoperative pain scores measured using the Visual Analog Scale (VAS)
4. Postoperative complication rates e.g., infections, adhesions, or other surgical complications

## **Key secondary outcome(s)**

The following secondary outcome measures are assessed using data collected in medical records at one timepoint:

1. Changes in Blood Biochemical Markers:
  - 1.1. Preoperative and postoperative hemoglobin levels
  - 1.2. White blood cell counts
  - 1.3. Neutrophil ratio
  - 1.4. C-reactive protein (CRP)
2. Intraoperative Metrics:
  - 2.1. Intraoperative blood loss
  - 2.2. The number of fibroids removed
3. Specific Recovery Milestones:
  - 3.1. Time to first flatus (measured in hours)

### **Completion date**

20/06/2022

## **Eligibility**

### **Key inclusion criteria**

1. Patients diagnosed with cervical fibroids by ultrasound, with a fibroid diameter of  $\geq 8$  cm
2. Age between 18 and 65 years
3. Availability of complete clinical data, including detailed preoperative examination results

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Adult

### **Lower age limit**

18 years

### **Upper age limit**

65 years

### **Sex**

Female

### **Total final enrolment**

152

### **Key exclusion criteria**

1. Presence of severe comorbidities, such as uncontrolled diabetes or severe cardiovascular or pulmonary diseases.

2. Patients who are pregnant or breastfeeding.
3. History of malignant uterine tumors.
4. Incomplete clinical data or missing preoperative examination results.

**Date of first enrolment**

31/01/2018

**Date of final enrolment**

01/06/2022

## Locations

**Countries of recruitment**

China

**Study participating centre**

**Women's Hospital School of Medicine Zhejiang University**

No.1 Bachelor Road, Shangcheng District

Hangzhou

China

310000

## Sponsor information

**Organisation**

Science and Technology Department of Zhejiang Province

**ROR**

<https://ror.org/05yj3y977>

## Funder(s)

**Funder type**

Government

**Funder Name**

Natural Science Foundation of Zhejiang Province

**Alternative Name(s)**

Zhejiang Natural Science Foundation, , Zhejiang Provincial Natural Science Foundation, Zhejiang Provincial Natural Science Fund, ZJNSF

**Funding Body Type**

Government organisation

**Funding Body Subtype**

Local government

**Location**

China

## **Results and Publications**

**Individual participant data (IPD) sharing plan**

The data-sharing plans for the current study are unknown and will be made available at a later date

**IPD sharing plan summary**

Data sharing statement to be made available at a later date