Retrospective analysis of the medical records of large cervical fibroids

Submission date	Recruitment status	Prospectively registered
22/11/2024	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
25/01/2025	Completed	Results
Last Edited	Condition category	Individual participant data
13/01/2025	Pregnancy and Childbirth	[X] 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, China

Contact information

Type(s)

Public, Scientific, Principal Investigator

Contact name

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

Nil known

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; zjpwhh@zju.edu.cn), ref: IRB-20220280-R

Study design

A retrospective cohort study

Primary study design

Observational

Secondary study design

Cohort study

Study setting(s)

Medical and other records

Study type(s)

Quality of life

Participant information sheet

Not available in web format, please use the contact details to request a participant information sheet

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 (≥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 measure

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

Secondary outcome measures

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)

Overall study start date

01/01/2018

Completion date

20/06/2022

Eligibility

Key inclusion criteria

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

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Upper age limit

65 Years

Sex

Female

Target number of participants

300

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

Sponsor details

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Sponsor type

Government

Website

https://www.zj.gov.cn/

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

Publication and dissemination plan

Planned publication in a peer reviewed journal (BMC Women's Health)

Intention to publish date

31/12/2025

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