



**SNS COLLEGE OF NURSING**  
**Saravanam Patti (po), Coimbatore.**



**DEPARTMENT OF NURSING**

**COURSE NAME : B.Sc. (Nursing) III Year.**

**SUBJECT : MEDICAL SURGICAL NURSING II**

**UNIT : IV-FEMALE REPRODUCTIVE SYSTEM DISORDERS**

**AND ITS MANAGEMENT**

**TOPIC : FIBROID UTERUS**



# OBJECTIVES



At the end of the class students will be able to

- ✓ Define fibroid uterus
- ✓ State the incidence
- ✓ Identify the etiology and risk factors of fibroid uterus
- ✓ Mention the classification of fibroid uterus
- ✓ Discuss the clinical features of fibroid uterus
- ✓ Explain the diagnostic studies of fibroid uterus
- ✓ Describe the medical management of fibroid uterus
- ✓ Discuss briefly about the surgical management of fibroid uterus
- ✓ Outline the complications of fibroid uterus
- ✓ Explain the nursing management of fibroid uterus



# INTRODUCTION

- ✓ Uterine fibroids are the most common benign pelvic tumors in women of reproductive age and usually are slow
- ✓ Growing, irregularly shaped, and benign (non-cancerous). They may be very small, or larger than a grape fruit, and occur as a single growth or as a cluster of growths.



# DEFINITION

- ✓ Uterine fibroids or leiomyomas are benign tumors of the uterine muscle, called myometrium.
- ✓ Leiomyomas are the most common benign tumors of the female genital tract.
- ✓ Incidence
- ✓ 20- 40% of reproductive age women



# ETIOLOGY

- ✓ It arises from smooth muscle cell of myometrium
- ✓ Exact etiology not known
- ✓ Monoclonal origin( arising from single cell)
- ✓ Race –women of african descent are 2-3 times more likely to develop fibroids than women of other races



- ✓ Fibroids grow in response to stimulation by the hormone estrogen and progesterone.
- ✓ Genetic abnormalities
- ✓ Abnormalities in the vascular( blood vessel) system
- ✓ Tissue response to injury
- ✓ Family history of fibroids



- ✓ Being over weight, obesity(higher estrogens)
- ✓ Heredity
- ✓ Nulliparity
- ✓ Onset of menstrual period prior to age 10
- ✓ African american heritage(3-9 times more often than in caucasian women)
- ✓ Consumption of alcohol(increased estrogen)
- ✓ Uterine infections
- ✓ Hypertension



# RISK FACTORS



GENETIC FACTORS



EXTRA WEIGHT



AFRICAN AMERICAN  
RACE



VITAMIN D  
DEFICIENCY



BIRTH CONTROL



EARLY ONSET OF  
PERIODS



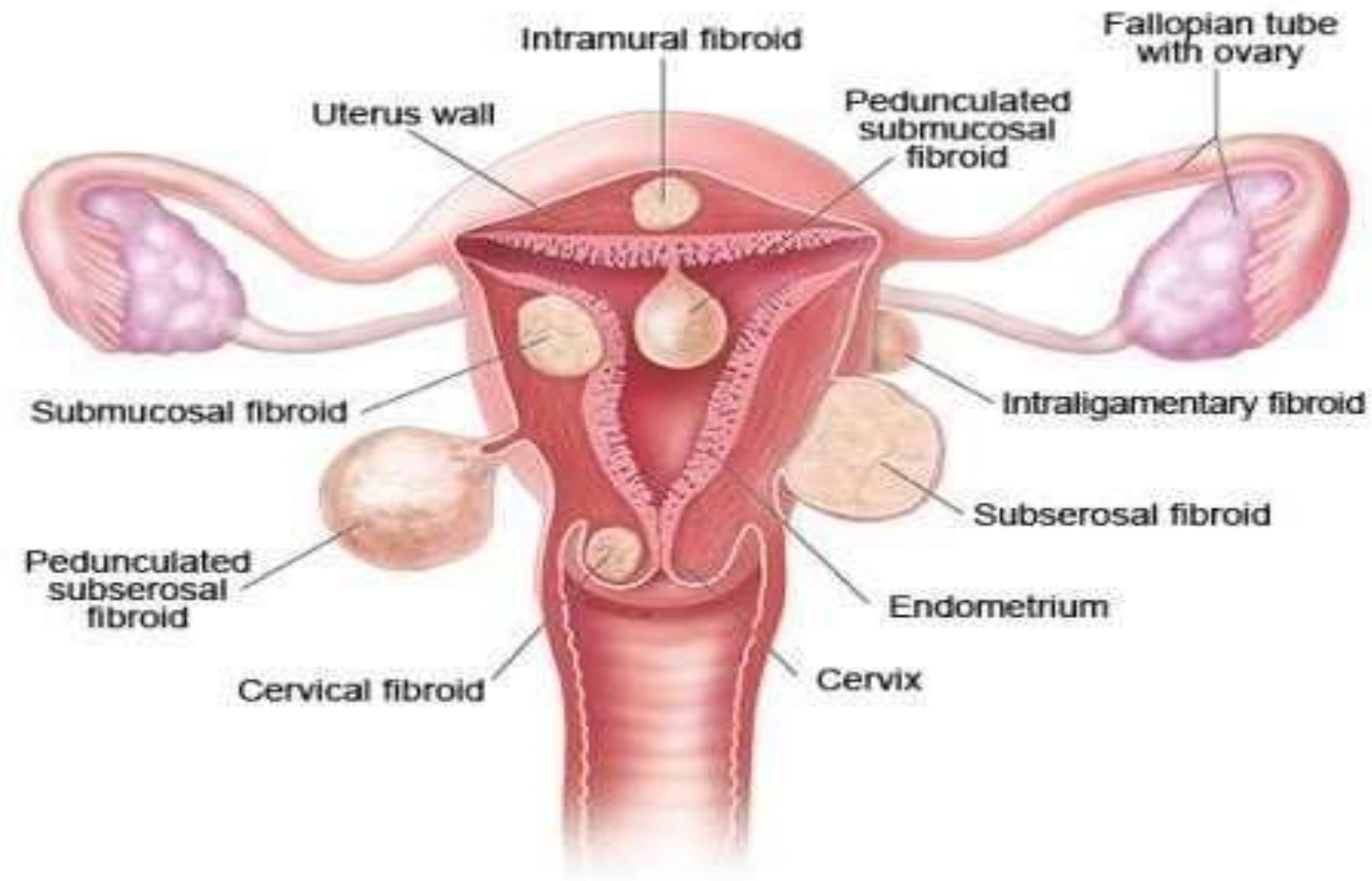
ALCOHOL



DIET LOW IN FRUITS  
AND VEGETABLES



# CLASSIFICATION OF FIBROIDS





Uterine fibroids are classified based upon their location within in the uterus

### SUBSEROSAL FIBROIDS

Are found beneath the serosa(the lining membrane on the outer surface of the uterus)

These often appear localized on the outside surface of the uterus or may be attached to the outside surface by a pedicle

### SUBMUCOSAL FIBROIDS

Grow in the myometrium near the inner lining of the uterus, called endometrium.

Like the subserous fibroids, they can become pedunculated and protrude in to the uterine cavity.



## INTRAMURAL FIBROIDS

- ✓ Are located within the muscular wall of the uterus

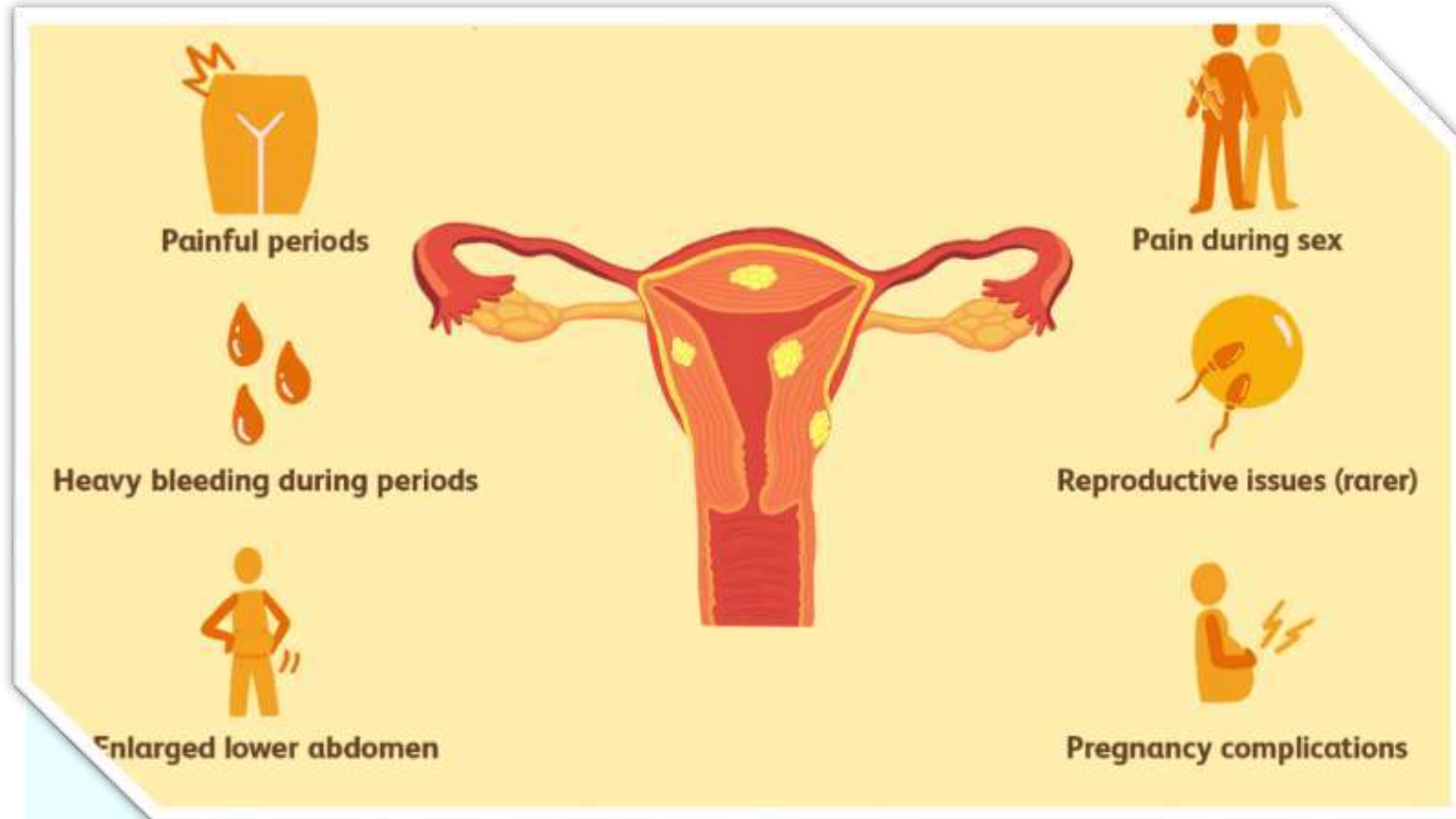
## PEDUNCULATED FIBROIDS

- ✓ Grow on a stalk of tissue known as a pedicle (like a mushroom), either extending inside the cavity of the uterus  
Or outside the uterus from its outer surface
- ✓ Uncommon sites are the ligaments of the uterus
- ✓ These fibroids are difficult to manage surgically as they are often near other structures such as the ureters, vessels and nerves and should only be attempted by an experienced surgeon.



# CLINICAL MANIFESTATIONS

- ✓ Majority of women with a fibroid do not have any symptoms
- ✓ Abnormal uterine bleeding is the most common symptom – if the tumor is near the endometrial lining, cause
  - ✓ prolonged Heavy menstrual bleeding(Menorrhagia)
  - ✓ Metrorrhagia( bleeding between periods)
  - ✓ Secondary dysmenorrhea
- ✓ Pressure symptoms from the bowel and bladder  
ex.constipation.chronic urinary tract infections
- ✓ Chronic pelvic pain, dyspareunia
- ✓ Pregnancy associated complications (miscarriage, premature labor)
- ✓ Abdominal pain/pelvic pain
- ✓ Low back pain
- ✓ Feeling of fullness in the abdomen







## HISTORY COLLECTION

- ✓ Age of menarche
- ✓ Parity
- ✓ History of miscarriages, infertility, present desire for children
- ✓ Actual complaints, duration of symptoms, specifically ask about bleeding pattern, pain, dysmenorrhea and pressure signs
- ✓ **Abdominal palpation-** finds out whether fibroid is mobile or not, its location, size of the uterus
- ✓ **Speculum examination** –try's to find the cervix whether it is in midline or distorted, and shortened. If there are fibroids in the lower part of the uterus.
- ✓ Assess for cervical mucus, discharge and ulcerations to rule out cervical cancer.



**Bimanual examination** – assess the size of the uterus, and its mobility

**Ultrasound** – can be done by transvaginal or by an abdomen. It is done to differentiate from other conditions like ovarian tumors.

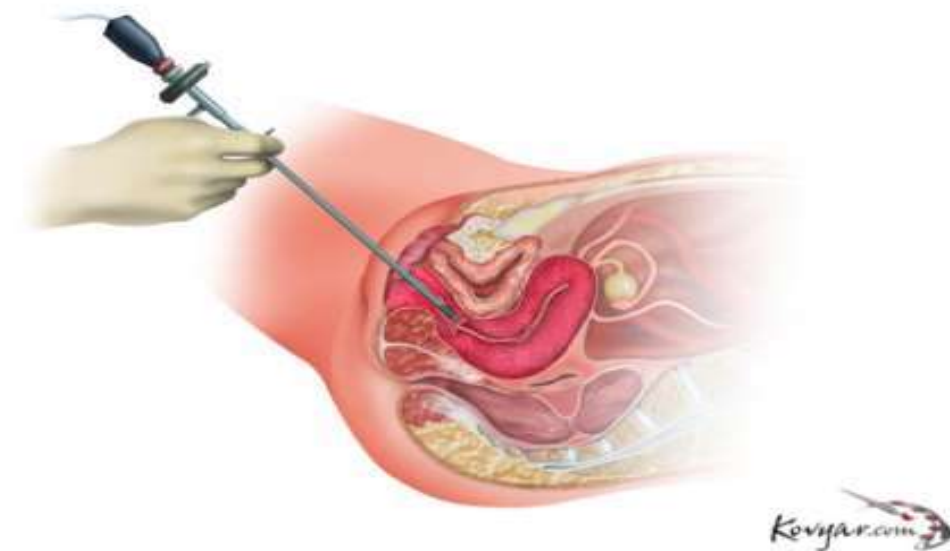
**Endometrial biopsy**- is performed by taking a sample tissue from the uterus.

**Hysterosalpingogram(HSG)** - IS done to determine a fibroid is present in the uterine cavity. In this procedure an ultrasound exam is done and contrast fluid is injected in to the uterus from the cervix. The fluid is visualized in the endometrial cavity and outlines the masses that are inside, such as submucosal fibroids.



- ✓ Hysteroscopy- it is performed to visualize a sub mucous fibroid or a small fibroid polyp
- ✓ CT, MRI – Useful in diagnosing fibroids.
- ✓ **LAB INVESTIGATIONS**
- ✓ Complete blood count is done to determine if patient have iron deficiency anemia because of chronic blood loss.

Hysteroscopic examination of the uterus





## MEDICAL MANAGEMENT

- ✓ Not a definitive treatment
- ✓ For symptomatic relief
- ✓ Pre operatively to decrease the size of fibroids
  
- ✓ Mild pain can be treated with NSAIDS like Ibuprofen and Acetaminophen
- ✓ **Hormonal drugs**
- ✓ These drugs regulate the menstrual cycle, treat symptoms like heavy menstrual bleeding and pelvic pressure.
- ✓ It reduces the size of fibroids



Oral contraceptive pills – e. g, progestins  
reduce the heavy flow

Gonadotropin- releasing hormone agonists- e.g,Leuprolide  
used pre and post operatively to shrink the size of fibroids

Anti – hormonal drug- e. g, Mifepristone

It can shrinks the fibroid to an extent comparable to the treatment with the  
GnRH analogs

Synthetic Androgen – e. g,Danazol (danocrine) Decrease the number of  
hormones made by the ovaries Anti –fibrinolytics- e.g,Tranexamic acid

Reduce uterine bleeding



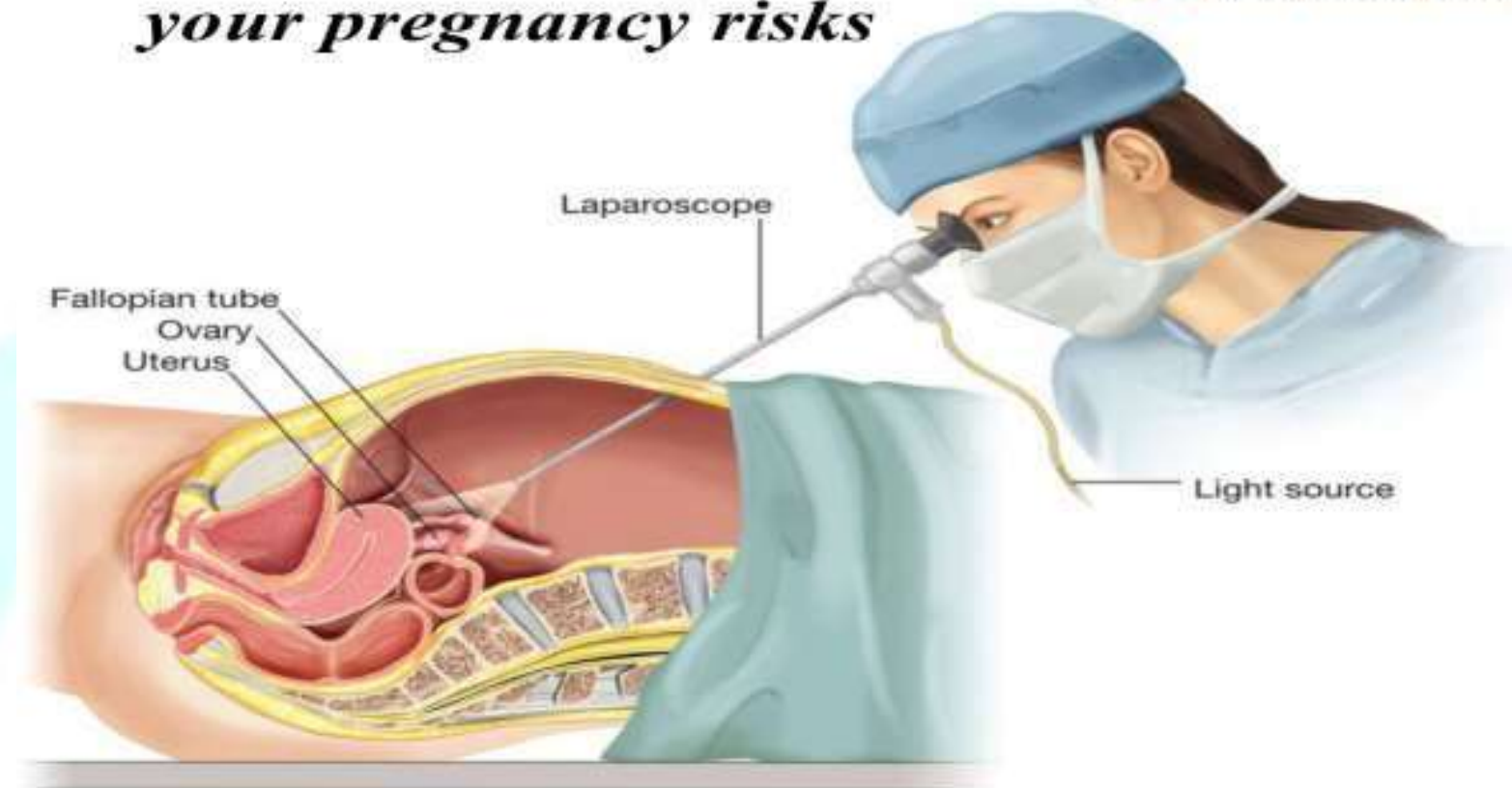
# SURGICAL MANAGEMENT

**HYSTERECTOMY:** It is a surgical removal of the uterus  
It is done for women with severe uterine fibroids

## Techniques of Hysterectomy

- Abdominal hysterectomy
- Vaginal hysterectomy
- Laparoscopic-Assisted vaginal Hysterectomy
- Laparoscopic –Assisted supra cervical Hysterectomy
- Total Laparoscopic Hysterectomy

*Remove them early to cut  
your pregnancy risks*



LAPAROSCOPIC SURGERY FOR  
**UTERUS FIBROID REMOVAL**

## Myomectomy

- ✓ Uterine fibroids are removed without damaging the healthy tissue
- ✓ It usually does not affect the fertility
- ✓ It is performed through a laparoscope or hysteroscope.

## INDICATIONS

- ✓ Unexplained infertility
- ✓ Fertility conservation
- ✓ Subserous pedunculated

## Myolysis:

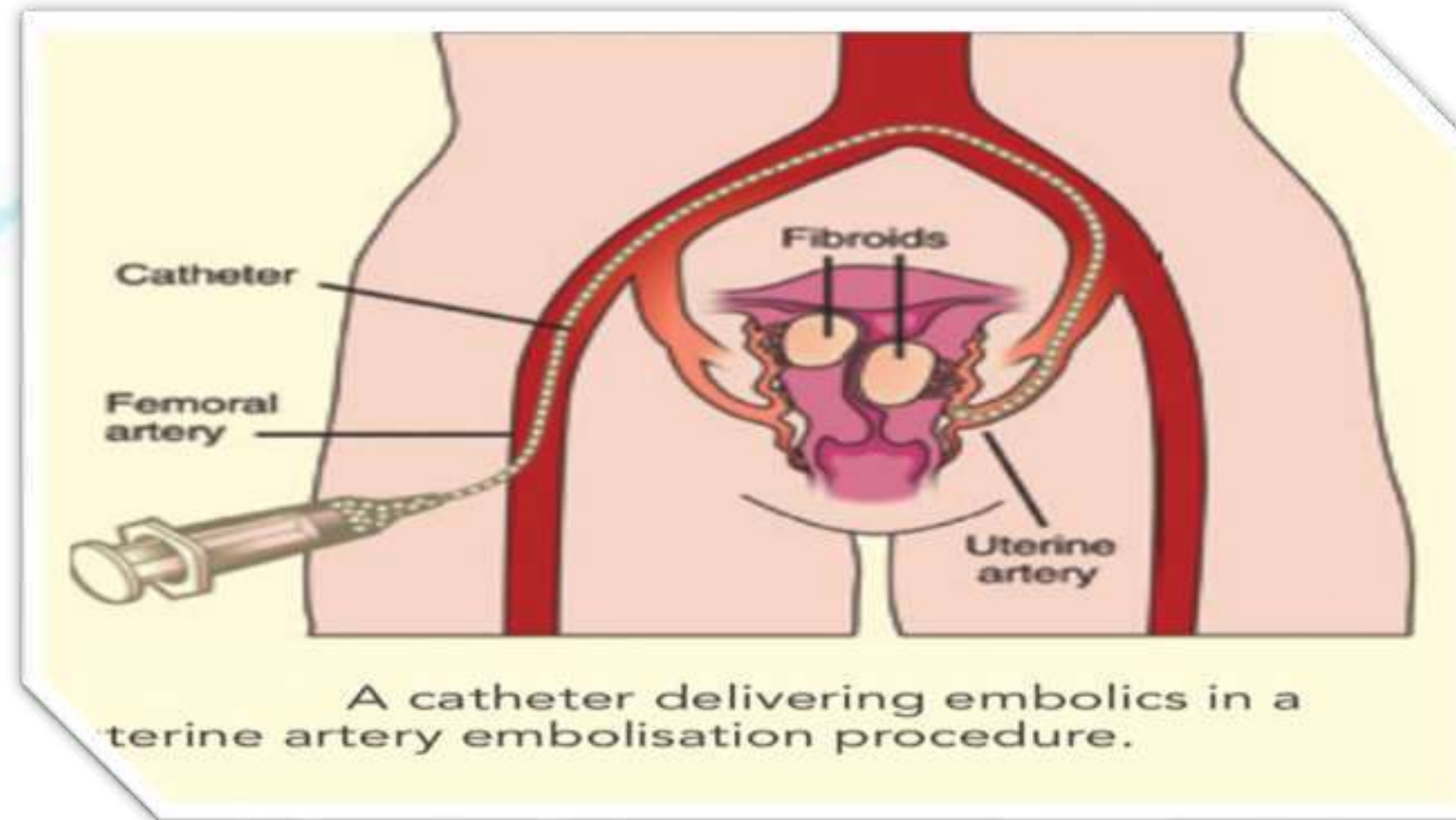
- ✓ It involves using electrical current passed through a needle to destroy blood vessels that supply the uterine fibroids.
- ✓ It is done by laparoscopic method
- ✓ It may affect fertility





- ✓ Uterine artery embolization
- ✓ In this procedure, embolic material (small plastic or gelatin materials) is injected in to the uterine artery and carried to the fibroid branches. To cut off the blood flow to the fibroids, causing them to shrink.
- ✓ Advantages
- ✓ No incision
- ✓ Shorter recovery time
- ✓ Complications may occur if the blood supply to the ovaries or other organs is comprised.







# COMPLICATIONS

- ✓ Menorrhagia
- ✓ Abdominal pain
- ✓ Premature birth, Labor problems, Miscarriages
- ✓ Infertility
- ✓ Twisting of the fibroid
- ✓ Anemia
- ✓ Urinary tract infections
- ✓ A c- section may be needed
- ✓ Some pregnant women with fibroids have heavy bleeding immediately after giving birth



# NURSING DIAGNOSIS

- ✓ Acute pain related to post operative wound as evidenced by facial expression and pain scale score
- ✓ Imbalanced nutrition less than body requirements related to pain as manifested by decreased food intake
- ✓ Impaired bowel elimination, constipation related to decreased activity, pain on straining
- ✓ Disturbed sleep pattern related to pain and hospitalization
- ✓ Low self esteem related to changes in femininity as evidenced by withdrawal, depression.



## MCQ'S IN FIBROID

Most common type of uterine leiomyoma

- a) Intramural
- b) sub serosal
- c) sub mucosal
- d) broad ligament

Which of the following is symptomatic treatment for fibroid

- a) OCP'S
- b) Testosterone
- c) GnRH agonist
- d) GnRH antagonist

Most common symptom of fibroid

- a) Abnormal uterine bleeding
- b) pelvis pain
- C) Mass in abdomen
- d) Abdominal discomfort



Most common pelvic tumor of reproductive age group is

- a) uterine fibroid
- b) dermoid cyst
- C) ovarian cyst
- d) ovarian tumor



# REFERENCES

- ✓ Lewis., Text Book of Medical Surgical Nursing, Elsevier publications, 12<sup>th</sup> edition
- ✓ Brunner and Suddarth's., Text Book of Medical Surgical Nursing
- ✓ Lippincott's publications, 10<sup>th</sup> edition

## NET REFERENCE

[www.medicine.com](http://www.medicine.com)

[www.webmed.com](http://www.webmed.com)

**THANK YOU**