

## Article : Secondary Infertility (Conf. 2017 Paper)

**Best paper award  
(First session conf. 2017)**

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We are publishing a paper "Secondary Infertility" presented by Ms Humera Siddiqua, which was awarded as best paper during National Conference 2017. Ms Humera Siddiqua, is a senior therapist of acupressure and she is providing very useful knowledge regarding secondary infertility.

**- Editor**

### **INFERTILITY as defined by WHO**

Infertility is "a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse (and there is no other reason, such as breastfeeding or postpartum amenorrhea)

- Primary infertility is infertility in a couple who have never had a child.
- Secondary infertility is failure to conceive following a previous pregnancy. Infertility may be caused by infection in the man or woman, but often there is no obvious underlying cause.

**Secondary infertility** is defined as the absence of a live birth for women who desire a child and have been in a union for at least five years since their last live birth, during which they did not use any contraceptives.

Thus the distinguishing feature is whether or not the couple have ever had a pregnancy which led to a live birth.

### **Causes**

- (1) Sexually Transmitted Diseases**
- (2) Genetic Factors**
- (3) General Factors:** Diabetes Mellitus, Thyroid, Undiagnosed And Untreated Coeliac Disease, Adrenal Disease.
- (4) Hypothalamic-pituitary Factors:** Hyper Prolactinemia And Hypo Pituitarism
- (5) Environmental Factors:** Toxins Such As Glues Volatile Organic Solvents Or Silicones, Physical Agents Chemical Dusts And Pesticides.

In order to understand the pathophysiology of Female Infertility, it is important to understand the anatomy and physiology of the Healthy female Reproductive System.

### **Female Reproductive System**

- Female reproductive system includes internal and external genital organs.

**External genital organs include :** Mons pubis, labia majora, labia minora, clitoris,

vestibule of the vagina, bulbs of vestibule and the greater vestibular glands.

- The internal genital organs include a pair of ovaries, a pair of uterine/ fallopian tubes, single uterus and vagina.
- The ovaries are physiologically homologous to the testes of the male.

### **Functions Of The Ovary**

1. Production of oocytes: During reproductive life of about 30 years (from puberty to menopause), the ovaries produce alternately one oocyte per month (per ovarian cycle of 28 days).
  - Liberation of ovum from the ovary is called 'ovulation'. It occurs on or about the 14th day of the 28-day menstrual cycle. Variations in the length of menstrual cycle are due to variations in the preovulatory phase; the postovulatory phase is constant.
  - An oocyte is viable (capable of being fertilized) for about 12-24 hours.
2. Production of hormones: (a) Oestrogen is secreted by the follicular and paraluteal cells, and (b) progesterone by the luteal cells.

### **Clinical Anatomy :**

- Polycystic Ovarian Syndrome
- Polycystic Ovarian Disease
- Ovarian Cyst
- Follicular/Functional Ovarian Cyst
- Endometrioma Or Chocolate Cyst

### **PCOS/PCOD**

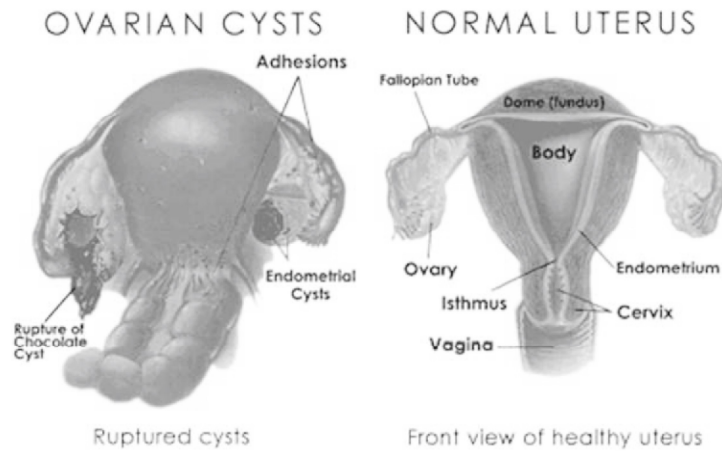
- Polycystic ovary syndrome (PCOS) is a set of symptoms due to elevated androgens (male hormones) in women.
- Signs and symptoms of PCOS include irregular or no menstrual periods, heavy periods, excess body and facial hair, acne, pelvic pain, difficulty getting pregnant, and patches of thick, darker, velvety skin.
- Associated conditions include type 2 diabetes, obesity obstructive sleep apnea, heart disease, mood disorders, and endometrial cancer.

### **OVARIAN CYSTS**

- An ovarian cyst is a fluid-filled sac within the ovary. Often
- they cause no symptoms. Occasionally they may produce bloating, lower abdominal pain, or lower back pain.
- If the cyst either breaks open or causes twisting of the ovary severe pain may occur. This may result in vomiting or feeling faint.

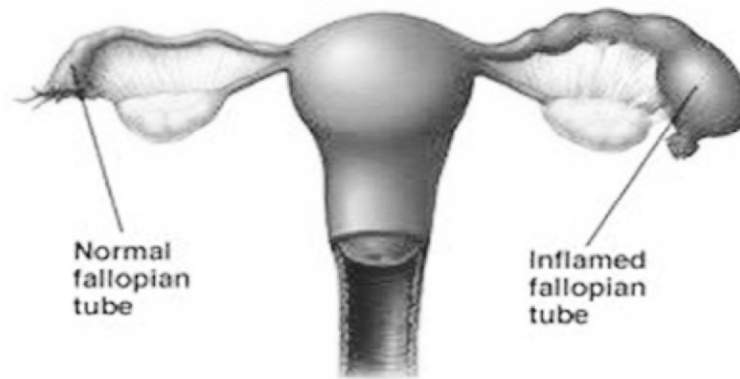
### **Signs and Symptoms of Ovarian Cyst**

Some or all of the following symptoms may be present, though it is possible not to experience any symptoms:



- Abdominal pain: Dull aching pain within the abdomen or pelvis, especially during intercourse.
- Uterine bleeding: Pain during or shortly after beginning or end of menstrual period; or abnormal uterine bleeding or spotting.
- Fullness, heaviness, pressure, swelling, or bloating in the abdomen.
- When a cyst ruptures from the ovary, there may be sudden and sharp pain in the lower abdomen on one side.

### ***Fallopian Tube Obstructions***



- Fallopian tube obstruction is a major cause of female infertility. Blocked fallopian tubes are unable to let the ovum and the sperm converge, thus making fertilization impossible.

# The Uterus

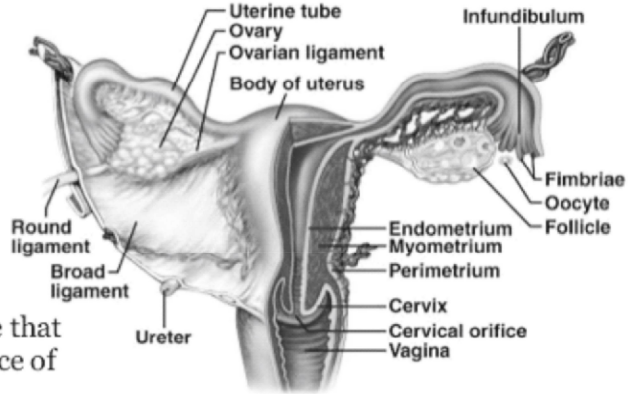
- Layers of uterus:

- **Perimetrium**

- a part of visceral peritoneum

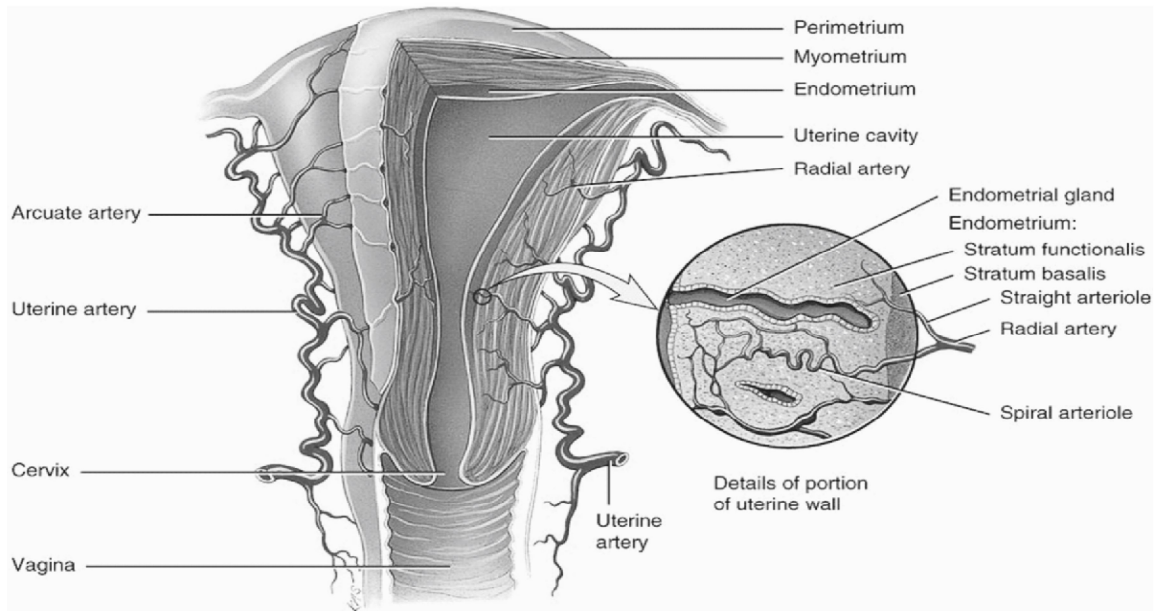
- **Myometrium**

- Bulk of uterus
    - Three layers of muscle that contract under influence of oxytocin during labor.



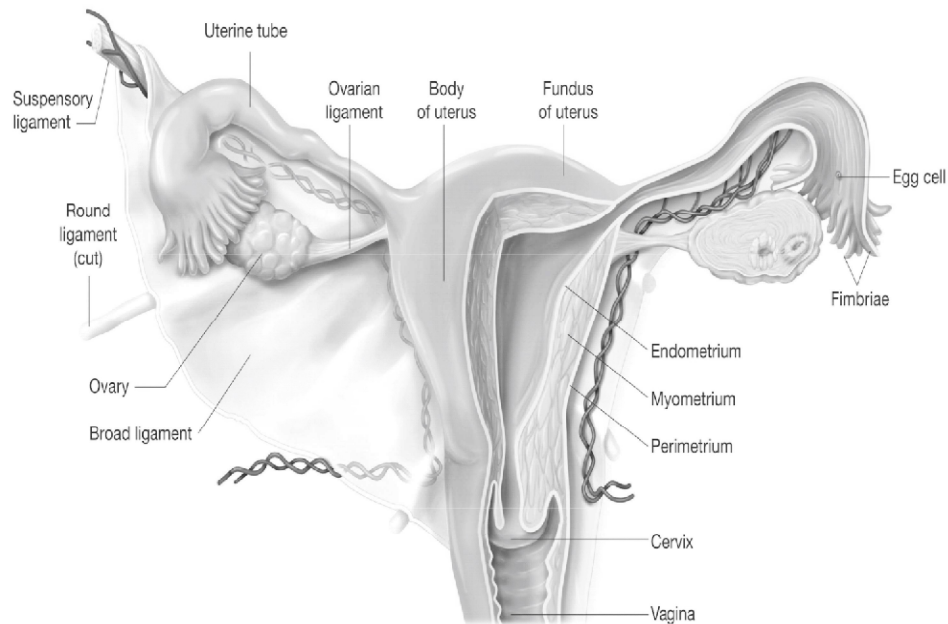
- **Endometrium** – Highly vascular mucosa

- **Stratum functionalis** – Shed during menstruation
    - **Stratum basalis** – Deeper, permanent layer, gives rise to new stratum functionalis after each cycle.



Anterior view with left side of uterus partially sectioned

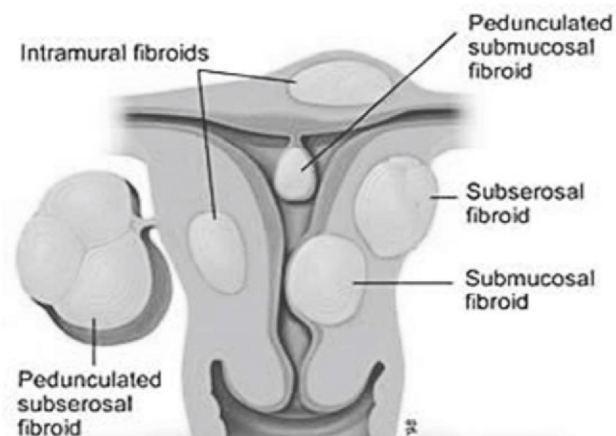
## Blood supply of the uterus



### **Clinical Anatomy**

- Uterine fibroids, also known as uterine leiomyomas or fibroids, are benign smooth muscle tumors of the uterus.
  - Most women have no symptoms while others may have painful or heavy periods. If large enough, they may push on the bladder causing a frequent need to urinate. They may also cause pain during sex or lower back pain. A woman can have one uterine fibroid or many of them.
- Women suffering from uterine fibroid also reportedly have trouble getting pregnant.

### **Different Locations Of Fibroids**



Any Abnormality In the structure or function or both of the above mentioned female reproductive organs leads to infertility in women

***Female Infertility Categorized on basis of location***

***1. Hypothalamic Pituitary Factors :***

- Hypothalamic Dysfunction
- Hyperprolactinemia

***2. Ovarian Factors:***

- Chemotherapy with certain agents have a high risk of toxicity on the ovaries.
- Many genetic defects also disturb ovarian function.
- Polycystic ovary syndrome
- Diminished ovarian reserve
- Premature menopause
- Menopause
- Luteal dysfunction
- Gonadal dysgenesis (Turner syndrome)
- Ovarian cancer

***3. Tubal (ectopic)/peritoneal factors***

- Endometriosis
- Pelvic adhesions
- Pelvic inflammatory disease(usually due to chlamydia)
- Tubal occlusion
- Tubal dysfunction
- Previous ectopic pregnancy.

***4. Uterine factors***

- Uterine malformations
- Uterine fibroids
- Implantation failure without any known primary cause. It results in negative pregnancy test despite having performed embryo transfer.

***5. Cervical factors***

- Cervical stenosis
- Anti sperm antibodies
- Non-receptive cervical mucus
- Vaginal factors
- Vaginal obstruction

## ***Treating Infertility With Acupressure***

### **CASE STUDY 01:-**

**PATIENT NAME :** Roopa Shree AGE:- 37, age of first baby 4 years.

**SYMPTOMS:-** After first delivery , had irregular cycles ( spotting) for past 4 years, she was on medication for depression, and scan reports showed bulky uterus, and on medication for thyroid.

After 2 months of treatment periods started .

After 4 months thyroid was normal and she conceived

Delivered a girl baby.

### ***Treatment discussion***

Stagnation of Qi and stasis of blood causes secondary amenorrhea with lower abdomen pain.

Long term depression or rage may cause stagnation of Qi and stasis of blood.

Movement of Qi and blood in the Chong & Ren Mo becomes stagnated consequently.

The sea of blood cannot fill. This results in amenorrhea.

**TREATMENT GIVEN:-** Stagnation of qi and stasis of blood causing secondary amenorrhea

Liv 3, Sp 10, CV 3, St 29, Li 4, Sp 6 (L&R) sedate

### **CASE STUDY 02:-**

**PATIENT NAME:-** Mini, AGE:- 39 years, age of first child 8 years.

**SYMPTOMS:-** Heavy menstrual bleeding with clots and painful periods. Uterus fibroids (pre malignant)

Treatment given was Stasis of blood in uterus

Conceived after 6 months, delivered a healthy male baby.

### ***Treatment discussion***

Stasis of blood in uterus.

Treatment given:

Liv 3, 13, 14, GB 34, UB 17, 18, CV 6, Sp 10, P 6, Tw 6 sedate (L&R)

### **CASE STUDY 03:-**

**PATIENT NAME:-** Savitha, AGE:- 30 years, first child 9 years

Conceived after 2 years- abortion

Conceived again after 1 year- miscarriage(6th month)

Conceived again after 1 ½ years- abortion

Conceived again after 2 years - abortion

After 9 months she conceived, delivered in 1st week of 9th month through c session (premature baby, 1.9 kilos)



### **Treatment discussion**

Deficiency of kidney causes poor nourishment of fetus and consequent fetal restlessness that may result in threatened or spontaneous abortion.

### **Cause of disease: Inadequate prenatal endowment**

Multiple pregnancy

Excessive sexual activities

If the kidney is insufficient, Chong and Ren Mo also becomes weak and fails to nourish the fetus.

The fetus loses nourishment, becomes restless and results in abortion.

Treatment started- deficiency of kidney qi

K 1, 3, CV 4, GV 4, UB 23, 47, H 4, UB 37 (L&R) tone

### **CASE STUDY 04:-**

**PATIENT NAME :-** Sana Khan, AGE:- 37 years, first child 13 years

**SYMPTOMS:-** weight gain of 22 kilos, irregular period, on medication for thyroid  
Increasing weight stopped, started periods after 2 months, scanty flow slowly improved after 8 months conceived. Delivered a normal baby through c section

### **Treatment discussion**

Accumulation of phlegm, humidity causes secondary amenorrhea with increased vaginal discharge.

### **TREATMENT PRINCIPLE:**

Expel phlegm and humidity

Circulate blood

Regulate menstruation

**TREATMENT:** Sp 6, 9, St 28, CV 3, 9, UB 22, (L&R) sedate UB 20, 23, 15 (L&R) tone

### **CASE STUDY 05:-**

**PATIENT NAME:-** Sunaina Bhandari, AGE:- 38, first child 10 years

**SYMPTOMS:-** lack of interest, depression, suicidal tendency, low blood pressure, low hemoglobin, scanty flow/ spotting

After 6 months conceived, due date next month.

### **Treatment discussion**

Deficiency of blood due to yin deficiency causes amenorrhea with progressive less menses ceasing all together.

### **TREATMENT PRINCIPLE:**

Nourish yin

Refrigerate heat

Regulate menstruation

**TREATMENT:-** deficiency of blood, K 3, 6, 9, 10, Lu 7, CV 4, 6, Sp 6, liv 8(L&R) tone. K 2, H 5, LU 10 (L&R) sedate.