### Poly Cystic Ovarian Syndrome (PCOS) Awareness & Homeopathic Treatment

### **Dr. Deepak Sharma**

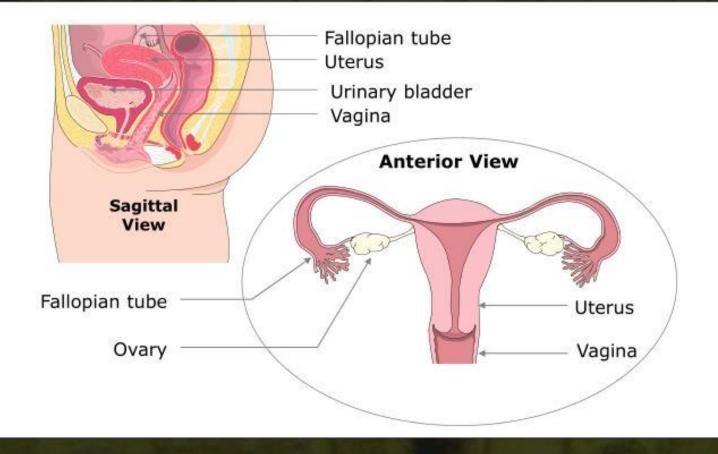
BHMS, MD (Student)

Founder: **O**rbit **C**linics<sup>®</sup> www.orbitclinics.com 9711153617

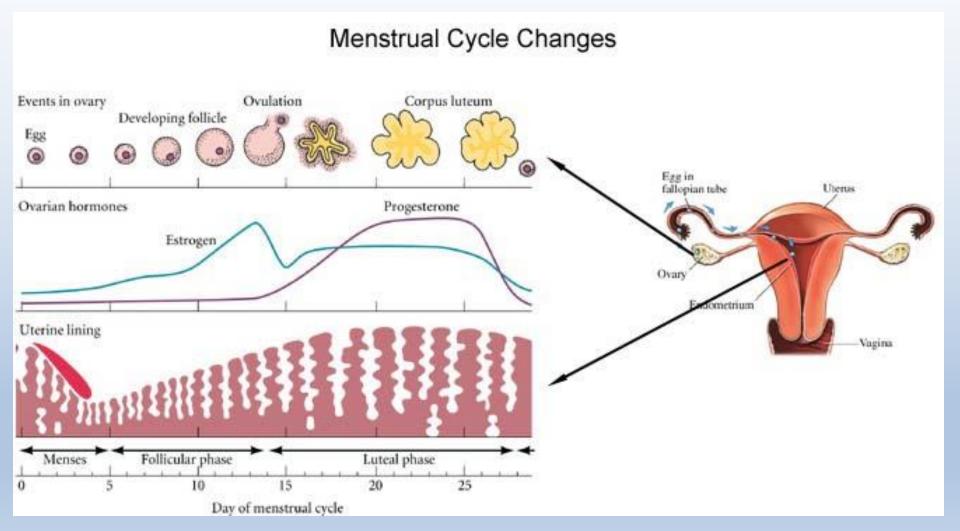
### **Objectives**

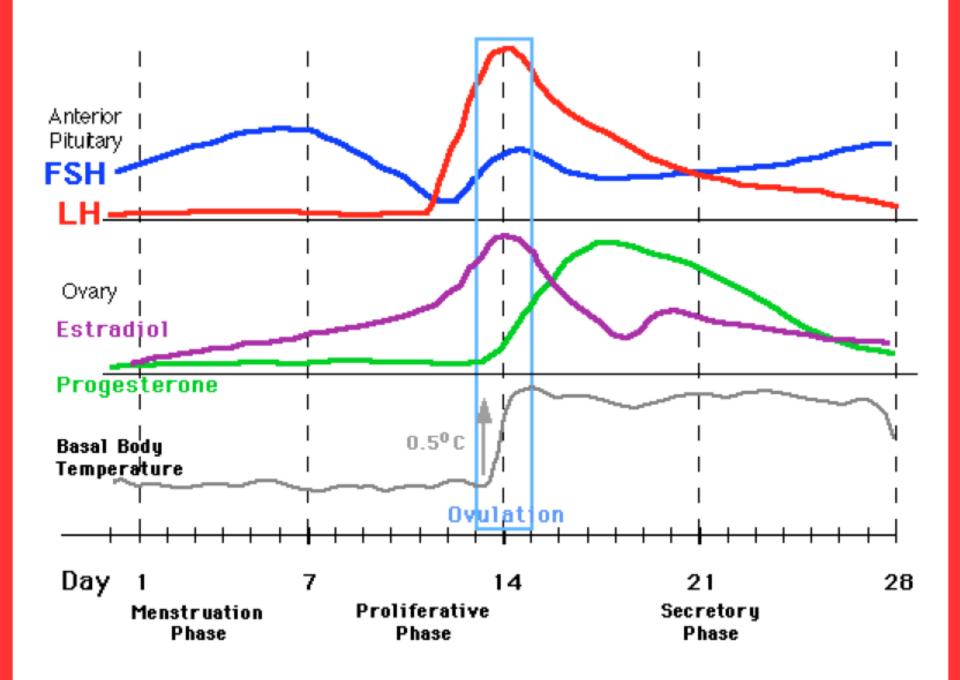
- 1. Understanding Normal Cycle.
- 2. Commons things we should know.
- 3. Epidemiology, Diagnosis and other clinical parts.
- 4. Awareness about PCOS.
- 5. Homeopathic Treatment and management.
- 6. Role of Diet and Exercises.

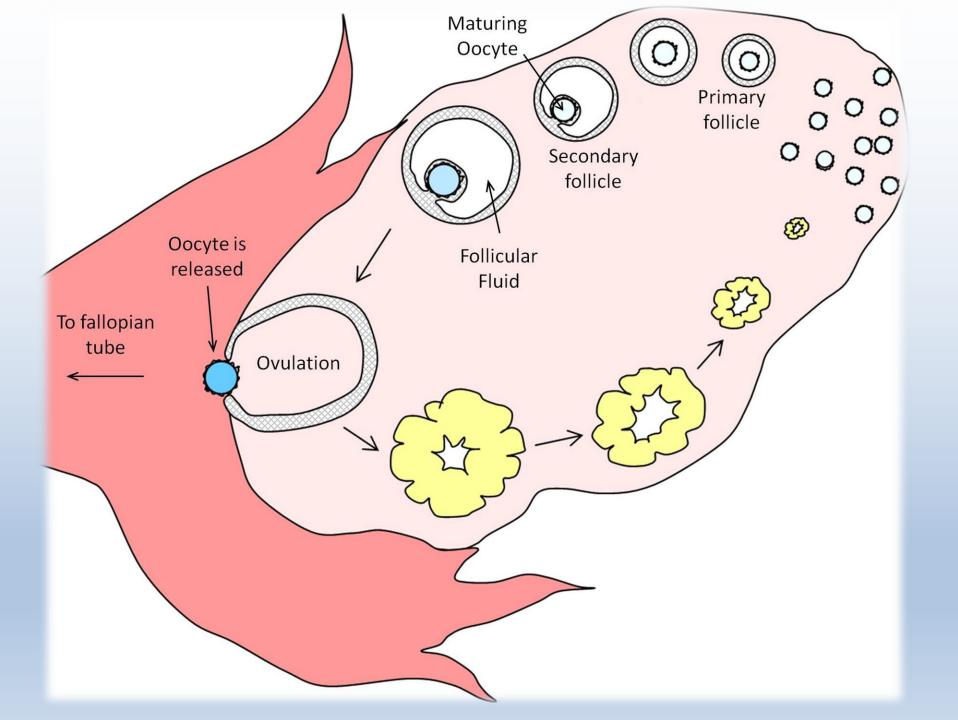
### Female Reproductive System



### **Normal Menstruation**



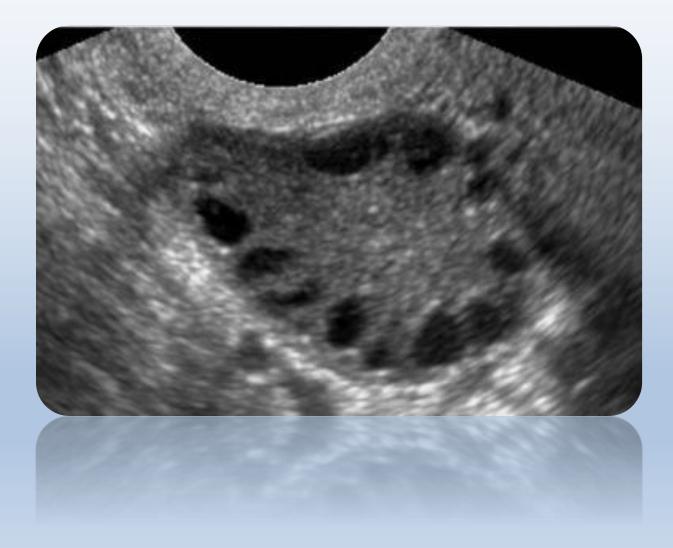




### Definition

Polycystic ovarian syndrome is a condition in which a woman has an imbalance of female sexual hormones. This may lead to menstrual cycle changes, cysts in the ovaries, trouble getting pregnant, and other health changes.

### PCOS Ovary



### History

- 1800s: polycystic ovaries –"cystic ophoritis"
- Stein & Leventhal (1953)-Enlarged ovaries, hirsutism, obesity, and chronic anovulation "Syndrome O" –Ovarian confusion-Ovulation disruption – Over-nourishment-Overproduction of insulin
- Polycystic ovarian disease
- Functional ovarian hyperandrogonism
- Hyperandrogenic chronic anovulation
- Ovarian dysmetabolic syndrome OR Metabolic Syndrome

### Epidemiology

- Affecting between 8 to 12 percent of women overall.
- Prevalence much higher in obese women (28% versus 5.5%)
- Genetic factors genes involved in insulin secretion and action, gonadotropin secretion and action, and androgen biosynthesis, secretion, transport, and metabolism
- Prevalence of PCOS in Indian adolescents is 9.13%.
- This draws attention to the issue of early diagnosis in adolescent girls.

### **Risk Factors**

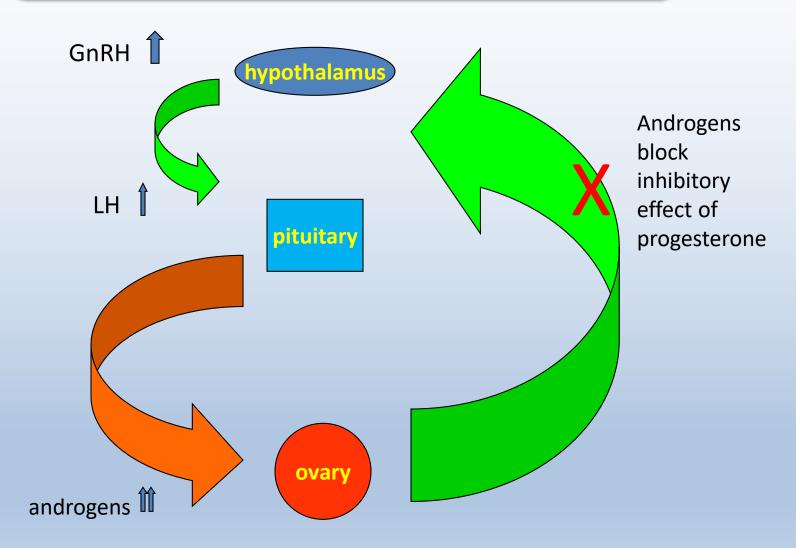
- Family History of PCOS / Diabetes mellitus
- Type 2 Diabetes
- Vitamin D Deficiency
- Stress
- Obesity?
- Irregular use of OCP?

# **Endocrine Abnormality**

- **Neuroendocrine derangement:**  $\uparrow$  LH relative to FSH
- Hyperinsulinemia: defect in insulin action or secretion
- Androgen excess: ovarian and adrenal

# **HPT** Axis

### **Endocrine Abnormality**



# Signs & Symptoms

- Irregularity in menstrual cycle (periods) that may come and go and may be very light to very heavy.
- PCOS can cause you to develop male-like characteristics includes:
  - Body hair growing on the chest, belly, face, and around the nipples
  - Decreased breast size
  - Enlargement of the clitoris
  - Thinning of the hair on the head, called male-pattern baldness
  - Voice gets deeper
- Other changes include:
  - Acne that gets worse
  - Dark or thick skin markings and creases around the armpits, groin, neck, and breasts

### Signs & Symptoms



### Acanthosis Nigricans, Pre diabetic

### Signs & Symptoms







### Dermatosis Papulosa Nigra

### NO single test or feature is diagnostic

#### Testosterone

- A total testosterone is likely to be more reliable than a free testosterone given the difficulties seen with many of the assays used for the latter.
- Testosterone values may be normal in PCOS.
- Sometimes patient with OCP's have abnormal testosterone levels.
- Dehydroepiandrosterone-sulfate (DHEA-S)
  - DHEA-S values may be normal or slightly elevated in PCOS.
  - DHEA-S values ≥800 µg/dL (21.7 µmol/L) warrant consideration of an adrenal tumor.

#### NIH Definition, 1990 Less inclusive 1 and2 needs to be met:

1.Hyperandrogenism –clinical (hirsutism, acne, frontal balding) –
biochemical (high serum androgen concentrations)
2.Menstrual irregularity –Chronic anovulation –Oligomenorrhea, > 35d

#### Rotterdam Definition, 2004 More inclusive 2 of 3 need to be met:

- 1. Hyperandrogenism Clinical or biochemical
- 2.Menstrual irregularity
- 3. Polycystic ovaries (Key difference from NIH) PCOS

#### **AE-PCOS Society, 2006**

- •Hyperandrogenism\*\*: Hirsutism and/or hyperandrogenemia AND
- •Ovarian Dysfunction: Oligo-anovulation and/or polycystic ovaries
- •Exclusion of other androgen excess or related disorders

- Prolactin
  - Mild hyperprolactinemia has been reported in 5% to 30% of patients with PCOS.
- 17-hydroxyprogesterone
  - A morning, fasting, unstimulated level of <200 ng/dL (<6 nmol/L) in the follicular phase reliably excludes late-onset 21-hydroxylase deficiency.
- Luteinizing hormone/follicle stimulating hormone (LH/FSH) ratio
  - A ratio ≥2.0 is suggestive of PCOS but is not highly sensitive or specific.

- Pelvic ultrasonography may be very helpful in the evaluation as well, but polycystic ovaries are not specific for PCOS with over 20% of "normal" women having this finding.
- Trans-vaginal sonography is very much useful but in some countries it can not be done in virgin girls.

# **Differential Diagnosis**

- •Hypothalamic amenorrhea
- •Premature ovarian failure
- Idiopathic hirsutism
- •Other endocrinopathies: thyroid disorder, hyperprolactinemia.
- •Neoplasm: Adrenal / Pituitary / hypothalamic
- •Drugs (e.g. steroids)
- •HA-IR-AN syndrome
  - -HyperAndrogenism,
  - -Insulin Resistance,
  - -Acanthosis Nigricans

### Complications

- Infertility
- Hypertension
- Anxiety and depression
- Diabetes mellitus
- Sleep apnea
- Endometrial cancer
- Endometrioma
- Breast Cancer

### **Treatment Plan**

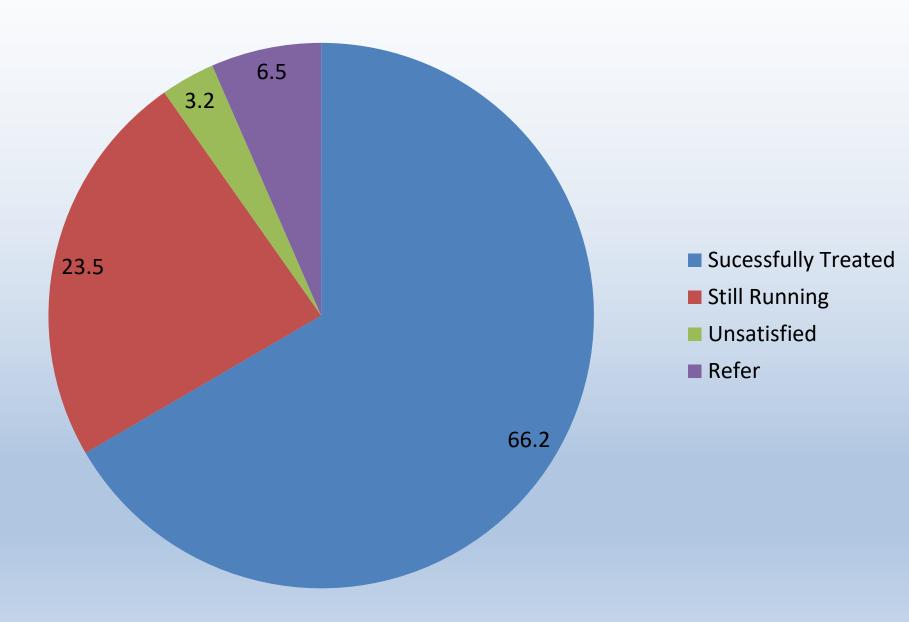
- Medicinal Treatment
- Diet Plan
- Exercises
- Counseling

### **Study at Orbit Clinics**

### At Orbit Clinics we got 246 cases of PCOS during Mar 2011 to Mar-17

- 164 (66.6%) cases were treated successfully.
- 58 (23.5%) cases are still running.
- 08 (3.2%) cases untreated incudes unsatisfied, had impatience, hurry for the treatment, not supportive.
- 6 (6.5%) cases I can not treat or refer to another homeopath.





### § 3

If the physician clearly perceives what is to be cured in diseases, that is to say, in every individual case of disease (knowledge of diseases, indication), if he clearly perceives what is curative in medicines, that is to say, in each individual medicine (knowledge of medicinal powers), and if he knows how to adapt, according to clearly defined principles, what is curative in medicines to what he has discovered to be undoubtedly morbid in the patient, so that the recovery must ensue-to adapt it, as well in respect to the suitability of the medicine most appropriate according to its mode of action to the case before him (choice of the remedy, the medicine indicated), as also in respect to the exact mode of preparation and quantity of it required *(proper dose)*, and the proper period for repeating the dose;- if, finally, he knows the obstacles to recovery in each case and is aware how to remove them, so that the restoration may be permanent, then he understand how to treat judiciously and rationally, and he is a true practitioner of healing art.



Dr. Sanjeev Sharma

Dr. Reena Agarwal **Consultant Pathologist** 

FULLY COMPUTERISED LAB CYTOPATHOLOGY / FNAC HISTOPATHOLOGY COMPUTERISED LAB ULTRASOUND = 3D-4D IMAGING = COLOR DOPPLER = ECHO = DIGITAL X-RAY

#### Date- AUG 4,2015

Mrs BHAKTI SHARMA 25 YRS/F

Ref : Dr RAJDEEP SHARMA MD

#### ULTRASOUND WHOLE ABDOMEN

Both diaphragmatic excursions are normal. No evidence of any pleural or pericardial effusion is seen.

Liver is normal in size and normal in echotexture. No evidence of any abscess or focal mass lesion is seen. Intrahepatic biliary and venous radicals are normal.

Gall Bladder is normal in size and wall thickness. No evidence of any calculi or mass lesion is seen. Common Bile Duct is normal.

Both kidneys are normal in size and echotexture. No evidence of any calculi, hydronephrosis or mass lesion is seen. Renal cortex is normal in thickness and echogenicity.

Pancreas is normal in size and echotexture.No focal mass lesion is seen. No duct dilatation or calcification is seen. No peripancreatic collection is seen.

Spleen is normal in size and echotexture.

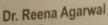
No ascitis or retroperitonial lymphadenopathy is seen. Bowel loops are not abnormally dilated.

Urinary Bladder is normal in size and wall thickness. No mass, calculi or diverticula is seen...

Uterus is anteverted normal in size and echotexture. No fibroid or focal mass lesion is seen. Uterine cavity is empty. Endometrial Echo appears normal.

A well defined lobulated cystic lesion with internal mild thick septation noted in left adnexa area, appears to be arising from left ovary, no evidence of solid component seen . Ovaries are not delineated separately. Size of lesion approx 10x9x8 cm.

Findings are suggestive of most likely ?left ovarian cystic lesion (?cystadenoma) IMPRESSION : Dc Sanjeev Sharr Dr. Reena Agarwal



MBBS, MD Consultant Pathologist For Sample Collection Call : 8527031541

srdlobal42@gmail.com

IIIrd-A/42, Bhagya Shree Apartments, Nehru Nagar Ghaziabad, E-mail PATIENT IDENTITY NOT CERTIFIED, THEREFORE NOT VALID FOR MEDICO LEGAL PURPOSE on and not disamptic. They should always be considered in conjunction with clinical and other investigative finding



Dr. Reena Agarwal

Diagnostic Centre FULLY COMPUTERISED LAB CYTOPATHOLOGY / FNAC HISTOPATHOLOGY ECG SSG ULTRASOUND = 3D-4D IMAGING = COLOR DOPPLER = ECHO = DIGITAL X-RAY

Pt's Name Under Care of	MRS deepu	AGE/ SEX 29Y/ f
	Dr Deepak sharma	AGE/ BEA 291/ I
		8 May 2016

#### ULTRASOUND TVS (LOWER ABDOMEN)

Urinary Bladder is normal in size and wall thickness.No evidence of any calculi,mass or diverticula is seen.

Uterus is anteverted normal in size , outline and echotexture. It measures 75 x 36 x 42mm in size approx Myometrial echoes are homogenous ,no fibroid or focal mass. lesion is seen.

Uterine cavity is empty. Endometrial Echo measures 8mm in thickness.

Both ovaries are normal in size and echotexture. No cyst or mass lesion is seen in adnexa.

Pouch of Douglous is clear.

**IMPRESSION** : Normal Study.

MBBS, MD

**Consultant** Pathologist

MBBS, DMRD, MD

Consultant Radiologist

Help Line : 8527031541

Consultant Radiologist

Dr. Sanjeev Sharma MBBS, DMRD MD

Illrd-A/42, Bhagya Shree Apartments, Nehru Nagar Ghaziabad, E-mail : srglobal42@gmail.com

PATIENT IDENTITY NOT CERTIFIED, THEREFORE NOT VALID FOR MEDICO LEGAL PURPOSE

Pathological and Radiological findings are only professional opinion and not diagnostic. They should always be considered in conjunction with clinical and other investigative findings. In case of doubt consultant is at liberty to get the test repeated & to get second opinion: (Findings on sample collected at Hospital/ClinicHome will not be liable to challenge)

A 23 year female came in our clinic on 8<sup>th</sup> Oct 2011 with the following complaints....

- Severe pain and cramps in both thighs on 1<sup>st</sup> day of periods since menarche
- Irregular menstruations for 1 year
- Weight gain during last 1 year
- Abnormal growth hairs on face and around nipples for 1 year
- Primary infertility since 10 months

During case taking we learned:

- Past history Typhoid at the age of 10 years
- Family history
  - Mother Asthma
  - Father Diabetes mellitus Type 2, Hypertension
  - Brother Asthma
  - Grand father Diabetes
  - Grand Mother Asthma
- Desire for Ice creams, Banana, Oranges, Chocolates
- Offensive sweat in both under arms, non offensive at face and neck
- Recurrent burning while urination treated conservatively by drink more water.

- Sleep lie on abdomen, often dreamed of dead grand mother, dreams of rats.
- Rarely feels romantic. Often feeling depressed
- Very keen in nature, need everything in disciplined manner.
- Gynecological History
  - LMP 4<sup>th</sup> Aug 2011 for 2 days only
  - Thick and red blood mixed white discharge per vagina
  - A burning pain in lower part of back and hips during menses.
  - Breast and nipples very tender but they never had any lump or infection.

- On first visit I did not prescribe any medicine and advice her to do some hormonal tests on the second day of period.
- On second visit on her hormonal profile was
  - T3-93.19 N
  - − T4 − 6.6 N
  - TSH 5.5 Slightly raised
  - LH 4.49 Slightly raised
  - FSH 4.49 Normal
  - PRL 25.16 Highly raised

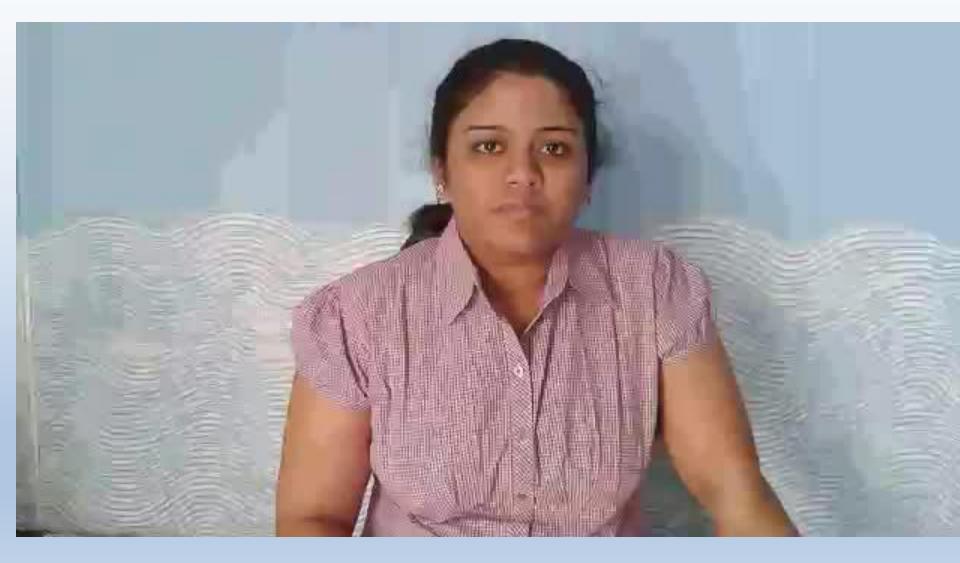
- First Prescription on 18<sup>th</sup> Oct 2011
  - Medorrhinum was given for these rubrics:
    - Desire for Ice creams, Banana, Oranges
    - Sleep lie on abdomen
    - Family History of Asthma and Diabetes denotes sycotic miasm.
  - I prescribed a dose of Medorrhinum 1M with placebo for a month.
- Second Prescription on 14 Nov 2011
  - Got menses with mild pains/cramps
  - Follow case again with placebos.

- Third Prescription on 04 Jan 2011
  - Came with a jolly mood and said "Dr I am quite happy now and got menses again on 14<sup>th</sup> Dec 2011".
  - This time she came with a skin eruption on her left arm with itching and aggravate by scratching advice to apply coconut oil.
  - Again follow up with placebo and advice to repeat test again.

- Fourth Prescription 23 Jan 2012
  - Got menses on 10<sup>th</sup> Jan 2012 now with more pains and cramps and aggravation in her skin eruption with severe itching and reports were
    - T3 139.08 N T4 7.50 N TSH 4.53 N
    - LH 4.44 Slightly decreased
    - FSH 4.01 Normal
    - PRL 22.75 Highly raised
  - At this time Calcarea sulphuric a 200C was give as her sypmtoms of skin erruption, Thermally HOT, perspire especially on the neck with advice to try to get pregnant.
- Fifth prescription 27 Feb 2012
  - Her complaints are now better, skin eruption improved
  - Got menses on 12 Feb 2012 with a very mild pains and NO cramps.
  - I again advice to try for pregnancy.



# After 27 Feb 2012 we did not hear anything about her complaint and got a call on 19<sup>th</sup> May 2014 and she informed about her 1.5 month live pregnancy.



Copyright **O**rbit **O**linics, www.orbitclinics.com

A lady of 39 years came to my clinic with her husband and parents all had lot of anxiety for a large cyst in her right ovary. When she sat down on the chair, she first asked, 'Doctor, have you treated these types of cases?' tell me frankly if you can otherwise I will go for another surgery."

She had a full anxious face and said doctor in 2004 a cyst in right ovary was already operated and I want to save my left one and hope you can solve my problem. Her husband and parents were anxious too because they have no child.

I found her main complaints were

- Cyst in ovary (narrated by patient itself)
- Pain in lower abdomen
- Pain in knees, small joints (during winters the skin turns to bluish color)
- Excessive bleeding during periods
- Fatigue all the time
- Acid reflux

- Past Medical History
  - Recurrent abdominal pains since childhood
  - Right ovarian cyst operated by laparoscope in 2004
  - Small joints pain since 2011
  - Recurrent throat infection for last 4-5 years
  - Vitamin D deficient known in 2004
- Family History
  - Mother: High blood pressure, hypothyroidism, DM II
  - Father: High blood pressure

- Personal History
  - Happily married
  - Tea twice in a day
  - Appetite Normal
  - Desire for sour/salt/spicy/oranges
  - Worse in congested area/ closed room/ sun light
  - Sweat excessive, offensive especially on the face and neck
  - Like Winters Hot patient
  - All complaints worse during the sleep and in the morning
  - Feel bursting headache in morning

- Personal History
  - Sleep: Disturbed, light, thoughtful, lying on back or on left side.
    - Dreams of snakes, dead relatives
  - Talkative in nature if anyone stop to talk then irritate
- Menstrual History
  - Menarche 14 years
  - Regular for 8-10 days
  - Whitish discharge per vagina before menses
  - Feel fresh during menses
  - No Joints Pain during menses

RT. ADENEXA appears normal . There is evidence of a sonolucent mass lesion seen in relation to Lt. ovary with internal echoes measuring 56x45mm

Rt. Ovary = 16x25x16mm with volume 03.41ml. Lt. Ovary = 56x45x49mm with volume 64.65ml.(including cyst)

- \* There is no evidence of any free fluid seen in POD.
- \* CERVIX appears normal.

<u>IMPRESSION</u>: FIBROID UTERUS WITH LT. OVARIAN CYST ? SIMPLE / EMDOMETRIOMA PLEASE CORRELATE CLINICALLY.

### First Prescription

- On 30 July 2013 I gave a dose of Lachesis mutus 1M liquid potency one drop in ½ cup of drinking water take one sip every 15 minute before sleep on the basis of ...
  - As a prime action on left ovary
  - Morning Headache
  - Feel better during menses
  - Joints pain relive during the menses
- I also advice to do exercises especially of anterior abdomen.

### Second Prescription 02 Aug 2013

- She came with a lot of pain in her right abdomen with the huge bleeding per vagina since 31 July 2013
- I console her and explain the theory of homeopathic medicines and advice to take liquid juices with electrolytes to maintain the blood amount.
- Follow up with placebo

### Third Prescription 09 Aug 2013

- Have no abdominal pain, bleeding stopped on 07th, joints again stiff
- Follow up with placebo and advice to come with ultrasound

• Fourth Prescription 19 Aug 2013

Came with ultrasound indicates "NO CYST"
 NO Fibroid, B/L PCOD 16-18 small follicles
 arranged in peripheral ovary.

 Patient is having regular cycles with decreased frequency of pains during cycle but still in under treatment for her joints pain and having no difficulties in periods and also did not fight with snakes in her dream.

BOTH ADENEXA shows bulky ovaries with multiple sonolucent cyst of 16-18 in number on both side measuring 2-3 mm in size. The cysts are arranged in periphery and making pearl string appearances. There is evidence of stromal hyperplasia on both side.

> Rt. Ovary= 29x28x26mm with volume 11.25ml. Lt. Ovary= 32x31x31mm with volume 15.79ml. (Normal Ovarian volume < 7 ml.)

- \* There is no evidence of any free fluid seen in POD.
- \* CERVIX appears normal.

<u>IMPRESSION</u>: B/L POLY CYSTIC OVARIAN DISEASE NEEDS CLINICOHORMONAL CORRELATION.

Miss Sonia 25 year female came from a reference of a gynecologist presented with following complaints ...

- \* Irregular menstruations for 3 year
- \* Hair falling for 1 year
- \* Generalized weakness for 6 months
- \* Already diagnosed case of PCOD

### <u>HISTORY</u>

After menarche she had regular menses for 9 years then menses were skipped for 3 months for which she consulted with a gynecologist. She continued her treatment for around 3 years but as the regularity of menses were only with the allopathic medication but when she stopped her prescribed medicine, menses would not appear. So she consulted with her gynecologist and her unwillingness to continue the treatment so the gynecologist referred to me.

### Main symptoms I found

- \* History of pain killers
- \* History of pain Location and Nature of pain
- \* Irritability
- \* Time management
- \* Discharges

The prescription was **Kali bichrom 30CH** on the basic on symptomatology 4 pills three times in a day for 3 months except during menstruation.

After 2 months with one cycle in between



#### PH.: 22002819, TELE-FAX : 22096924 HOLY CHILD NURSING H

C-43-44, EAST KRISHNA NAGAR, (OPP. SWARAN CINEMA), DELHI-110051 **Registered with Govt. of NCT Delhi** 

Date	14/03/2015	Srl.No.
Name	MS. SONIA	
Refd.By.	Dr. VEENA GUPTA ME	

Ref No. 10000 Age

Sex

F

#### **ULTRA SOUND - LOWER ABDOMEN**

2

Urinary bladder does not show any calculus or mass lesion.

Uterus is anteverted and measures normal in size . Myometrium shows normal echo-pattern. No focal space occupying lesion is seen.

Endometrial echo is normal. Endometrial thickness is 10 mms.

Both ovaries are enlarged in size & shows slightly increased echotexture.

FLUID IS SEEN IN PARA - OVARION REGION

No free fluid is seen in pouch of douglas.

IMPRESSION : Bilateral PCOD.



DR. ABISHEK AGGRWAL MBBS DMRE RADIOLOGIST

DR. YOGENDER MITTAL. MBBS (DMRD)

DR.M.AJMERA MBBS M.D.



#### PH.: 22002819, TELE-FAX : 22096924 HOLY CHILD NURSING

C-43-44, EAST KRISHNA NAGAR, (OPP. SWARAN CINEMA), DELHI-110051 **Registered with Govt. of NCT Delhi** 

08/05/2015 Srl.No. 6 Date MS. SONIA Name Dr. DEEPAK SHARMA Refd.By.

Ref No. 10000 25Yr. Age

Sex

#### **ULTRA SOUND - LOWER ABDOMEN**

Urinary bladder does not show any calculus or mass lesion.

Uterus is anteverted and measures 48 x 64 x 78 mms. Myometrium shows normal echo-pattern. No focal space occupying lesion is seen.

Endometrial echo is normal. Endometrial thickness is 4 mms.

Both ovaries are normally visualised No adnexal mass is seen.

No free fluid is seen in pouch of douglas.

DR. ABISHEK AGGRWAL

MBBS DMRE RADIOLOGIST DR. YOGENDER MITTAL. MBBS (DMRD)

Dr. DEVENDERA KUMAR GUP MBBS M D

THIS REPORT IS NOT VALID FOR MEDICO LEGAL PURPOSE.

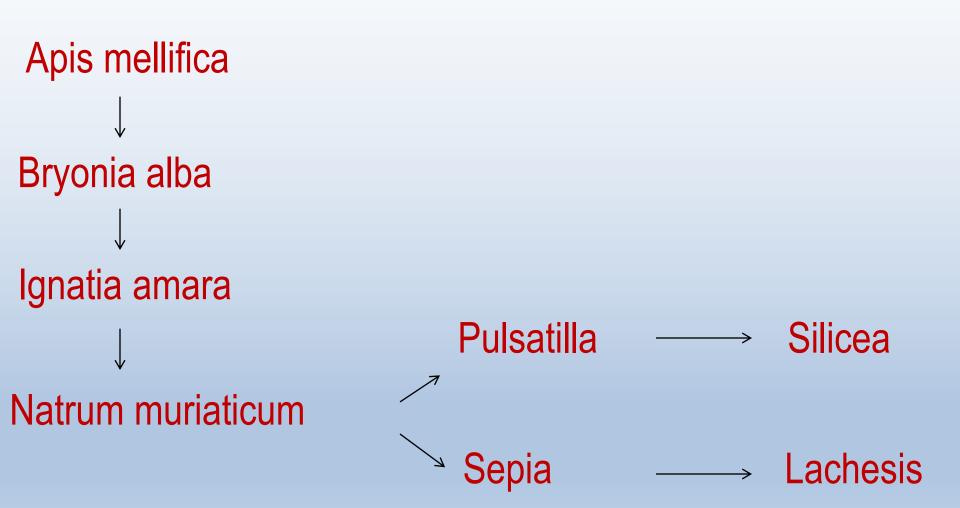
THIS REPORT IS NOT VALID COPYRIGHT Orbit Clinics, www.orbitclinics.com

### Classical Homeopathy

Includes the treatment with the principles of homeopathy.

### Clinical Homeopathy

Includes to regulate menstrual cycle and eliminate symptoms a.s.a.p..



Calcarea carbonica ↓ Lycopodium clavatum ↓ Calcarea sulphurica

My own observation Under study

#### • THUJA OCCIDENTALIS:

Menses scanty, retarded. Warty excrescences on vulva and perineum. Profuse leucorrhoea; thick, greenish. Severe pain in left ovary and left inguinal region. **Profuse perspiration before menses**. vagina very sensitive.

#### • IODUM:

Great weakness during menses. Menses irregular. Wedge like pain from ovary to uterus. Dwindling of mammary glands. Nodosities in the skin of mammae. Acrid leucorrhoea, thick, slimy, corroding the linen. Wedge like pain in the right ovarian region.

#### NATRUM MUR:

Menses irregular; usually profuse. Vagina dry. Leucorrhoea acrid and watery. bearing down pains; worse in the morning. Prolapse uteri, with cutting in urethra. Ineffectual labor pains. Suppressed menses. Hot during menses. skin greasy, oily. Dry, crusty eruptions esp. on the margins of scalp, behind ears and bends of limbs. Alopecia.

#### SEPIA:

Menses too late and scanty, irregular; sharp clutching pains. Pelvic organs relaxed. Bearing down as if everything would escape through vulva; must cross limbs to prevent protrusion, or press against vulva. Leucorrhoea yellow, greenish; with much itching. Violent stitches upward in the vagina, from uterus to umbilicus. Morning sickness. Vagina painful esp. on coition. tendency to abortion. chloasma, rosacea; saddle like brownish distribution on nose and cheeks.

#### PULSATILLA:

Amenorrhea. Suppressed menses from wet feet, nervous debility, or chlorosis. Tardy menses. Too late, scanty, thick, dark, clotted, changeable, intermittent. Chilliness, nausea, downward pressure, painful, flow intermits. Leucorrhoea acrid, burning, creamy. Pain in back, tired feeling. Diarrhea during and after menses. Acne at puberty.

#### APIS MELLIFICA:

Menses suppressed, with cerebral and head symptoms, esp in young girls. Dysmenorrhea, with severe ovarian pains. Bearing down as if menses were to appear. Oedema of labia; relieved by cold water. Soreness and stinging pains; worse in right ovary. Great tenderness over abdomen and uterine region.

#### SULPHUR:

Menses too late, short, scanty, and difficult; thick, black, acrid, making parts sore. Menses preceded by headache or suddenly stopped. Pudenda itches. Vagina burns. Much offensive perspiration. Leucorrhoea, burning, excoriating. Nipples cracked, smart and burn. skin dry, scaly, unhealthy. Pimply eruptions, pustules.

### OTHER USEFUL MEDICINES:

- Ashoka
- Cyclamen
- Gossypium
- Kali sulph
- Kali carbonica
- Pinus lum

### INTERCURRENT MEDICINES:

- Oophoorinum
- Tuberculinum
- Medorrhinum
- Pituterinum

### **Diet Management**

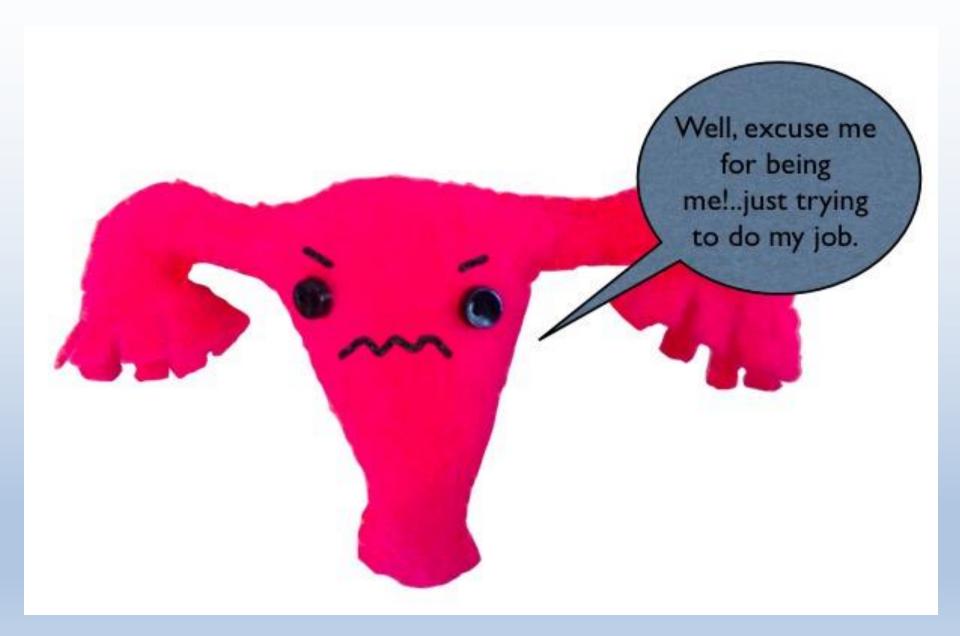
- Diet rich in low glycemic diet, Avoid sugars. Because there is already hyperinsulinaemia which is causing hormonal imbalance so we should make sure not to take in diet.
- Eat more of healthy fruits and vegetables.
- Flax seeds, almonds, avocado, olive oil.
- Diet rich in omega 3 which decreases androgen. Products rich in omega 3 are walnut and flax seeds.
- Avoid packaged food and juices.
- Control your weight and maintain your weight from eating healthy diet and foods

## **Importance of Exercise**

- A moderate amount of daily exercise increases of levels of IGF-1 binding protein and decreases IGF-1 levels by 20%.
- Modest weight loss of 2-5% of total body weight can help restore ovulatory menstrual periods in obese patients with PCOS.
- A daily 500-1000 calorie deficit with 150 minutes of exercise per week can cause ovulation.
- The Androgen Excess and Polycystic Ovary Syndrome Society recommends lifestyle management as the primary therapy in overweight and obese women with PCOS for the treatment of metabolic complications.

### Counseling

- Stop Irregular / self medication
- Good dietary intake
- Regular exercises
- Think happy



# Thank You

All my dear students and teachers.