



Indian Fertility Society

SYNAPSES

POLYCYSTIC OVARIAN SYNDROME

Introduction

It is a complex **polygenic disorder with contributory environmental factors** affecting **one in four or five** woman in reproductive age group.

Symptoms

Menstrual Irregularity: and sometimes abnormal menstruation, absence of menstruation, heavy menstruation, short and light menstruation or spotting.

Weight: Obesity, overweight, or weight gain.

Skin: Acne or oily skin.

Hair: Hirsutism and hair fall.

Also common: Infertility, Acanthosis Nigricans (Darkening of skin folds and creases), depression.

Diagnostic Criteria:1

In adolescents (<20 years of age) who are more than two years after onset of menarche, where both androgen excess and ovulatory dysfunction are present. Ultrasound is not recommended for diagnosis in this age group.

In adult women if two of the three of androgen excess, ovulatory dysfunction, or polycystic ovarian morphology are present, with ultrasound required where either androgen excess or ovulaory dysfunction are not present.

Table 1: Criteria for diagnosis of PCOS²

Clinical finding	National Institutes of Health criteria, 1990 (must have both of the findings marked below)	Rotterdam criteria, 2003 (must have any two of the findings marked below)	Androgen Excess and PCOS Society, 2009 (must have A plus either B or C)	
Hyperandrogenism*	X	×	Α	
Oligomenorrhea	×	×	В	
Polycystic ovaries		X	C	

PCOS = polycystic ovary syndrome.

Disorders of exclusion are ruled out including thyroid disease (thyroid stimulating hormone), hyperpro-lactinemia (prolactin level), and non-classic congenital adrenal hyperplasia (serum 17-OHP)

Etiopathogenesis

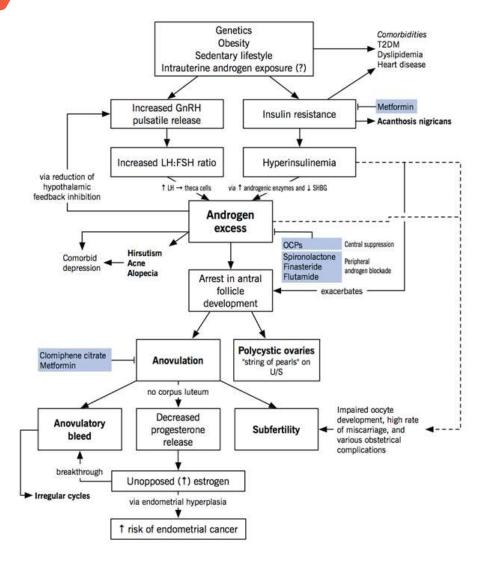


Figure 1: Etiopathogenesis of PCOS³

^{*—}Clinical or biochemical evidence of excess androgen.

Management¹

- Lifestyle intervention (preferably multicomponent including diet, exercise and behavioral strategies) should be recommended in all those with PCOS and excess weight, for reductions in weight, central obesity and insulin resistance.
- Achievable goals such as **5% to 10% weight loss** in those with excess weight yields significant clinical improvements and is considered successful weight reduction within six months.
- SMART (Specific Measurable, Achievable, Realistic and Timely) goal setting and self-monitoring can enable achievement of realistic lifestyle goals.

Exercise:

- In adults from 18–64 years, a minimum of 150 min/week of moderate intensity physical activity or 75 min/week of vigorous intensities or an equivalent combination of both, including muscle strengthening activities on 2 non-consecutive days/week.
- In adolescents, at least 60 minutes of moderate to vigorous intensity physical activi-ty/day, including those that strengthen muscle and bone at least 3 times weekly.
- Activity to be performed in at least 10-minute bouts or around 1000 steps, aiming to achieve at least 30 minutes daily on most days.

Pharmacological treatment in PCOS¹

- When prescribing pharmacological therapy in PCOS, benefits, adverse effects and contraindications in PCOS and general populations need to be considered and discussed before commencement.
- COCP (Combined Oral Contraceptive Pills), metformin and other pharmacological treatments are generally off label in PCOS.
- Holistic approaches are required and pharmacological therapy in PCOS needs to be considered alongside **education**, **lifestyle and other options including cosmetic therapy and coun-selling.**
- The COCP alone should be recommended in adult women with PCOS for management of hyperandrogenism and/or irregular menstrual cycles.
- The COCP alone should be considered in adolescents with a clear diagnosis of PCOS for management of clinical hyperandrogenism and/or irregular menstrual cycles.
- The COCP could be considered in adolescents who are deemed "at risk" but not yet diagnosed with PCOS, for management of clinical hyperandrogenism and irregular menstrual cycles.
- The **35 microgram ethinyloestradiol plus cyproterone acetate preparations should not be considered first line** in PCOS as per general population guidelines, due to adverse effects including venous thromboembolic risks.
- The **lowest effective estrogen doses (such as 20-30 micrograms of ethinyloestradiol** or equivalent), and natural estrogen preparations are preferred, balancing efficacy, metabolic risk profile, side effects, cost and availabilit
- In combination with the COCP, metformin should be considered in women with PCOS for management of metabolic features where COCP and lifestyle changes do not achieve desired goals, adolescents with PCOS and BMI >25 kg/m2 where COCP and lifestyle changes do not achieve desired goals, high metabolic risk groups including those with diabetes risk factors, impaired glucose tolerance, or high-risk ethnic groups.
- In combination with the COCP, anti-androgens should only be considered in PCOS to treat hirsutism, after six months or more of COCP and cosmetic therapy have failed to adequately improve symptoms, androgen related alopecia in PCOS.
- In PCOS, anti-androgens must be used with effective contraception, to avoid male foetal undervirilisation. Variable availability and regulatory status of these agents is notable and for some agents, potential liver toxicity requires caution.
- **Inositol** (in any form) should currently be considered an experimental therapy in PCOS, with emerging evidence on efficacy highlighting the need for further research.

Infertility¹

- **Letrozole** should be considered first line pharmacological treatment for ovulation induction in women with PCOS with anovulatory infertility and no other infertility factors to improve ovulation, pregnancy and live birth rates.
- Clomiphene citrate could be used alone in women with PCOS with anovulatory infertility and no other infertility factors to improve ovulation and pregnancy rates.
- **Gonadotrophins** could be used as second line pharmacological agents in women with PCOS who have failed first line oral ovulation induction therapy and are anovulatory and infertile, with no other infertility factors.
- **Laparoscopic ovarian surgery** could be second line therapy for women with PCOS, who are clomiphene citrate resistant, with anovulatory infertility and no other infertility factors.
- Laparoscopic ovarian surgery could potentially be offered as first line treatment if laparos-copy is indicated for another reason in women with PCOS with anovulatory infertility and no other infertility factors.
- In the absence of an absolute indication for IVF or intracytoplasmic sperm injection (ICSI), women with PCOS and anovulatory infertility could be offered **IVF** as third line therapy where first or second line ovulation induction therapies have failed.

References

- 1. International evidence based guideline for the assessment and management of polycystic ovary syndrome. 2018.
- Legro RS, Arslanian SA, Ehrmann DA, et al.; Endocrine Society. Diagnosis and treatment of polycystic ovary syndrome: an Endocrine Society clinical practice guideline. J Clin En-docrinol Metab. 2013;98(12):4565–4592
- 3. Alexandra Rotstein: Polycystic Ovarian syndrome. http://www.pathophys.org/pcos/

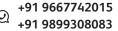
Dr M Gouri Devi President **Dr Pankaj Talwar** Secretary General

Contributor

Dr Megha Sharma IVF Consultant

Dr RupaliIVF Consultant
Executive Member
Chief Coordinator
Synapses - IFS

Dr Rhythm Ahuja Gupta IVF Consultant Co-coordinator Synapses - IFS



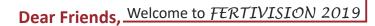


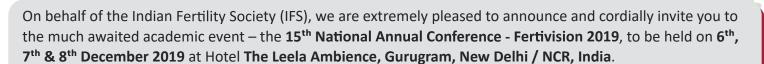






Invitation





This conference is aimed to provide the most comprehensive academic platform in the field of Infertility and Assisted Reproductive Technology (ART)" befitting the theme of the meeting "Beyond Tomorrow"

Renowned and leading expert faculty from around the world would gather and deliver talks in our cutting edge scientific program which will not only enrich your current knowledge and clear all doubts faced in day-to-day clinical practice, but will also enlighten you about the latest innovations and ongoing research.

A large number of renowned international faculties have already confirmed their participations till date. The precongress workshops on 6th December are specially designed for informal in-depth training with hands on sessions on simulators and live, where ever feasible. There will be 4 simultaneous running streams on 7th & 8th December covering a wide variety of topics, enabling you to choose the deliberations specific to your area of interest and clinical practice. We are having a dedicated hall for the esteemed embryologist friends.

The best oral and poster presenters under various categories and the quiz winners will be honored with special awards and prizes. Do join us in large numbers and update your knowledge with most updated current standards in clinical practice, as well as get inspired to innovate further to overcome remaining enigmatic issues!

The three days of scientific program will encompass didactic lectures, keynote presentations, panel discussions and orations. There will be 9 Pre-conference workshops based on Ovulation Induction, Ultrasound, Andrology, Embryology, Hands on Embryo Transfer, Ovum Pickup and PGS and more. These workshops will be in addition to the special state of the art workshops by the faculty from IFFS and ESHRE. We expect delegates across India, Sri lanka, Bangladesh, Nepal, Middle - East Countries and African Nations and the arrangements are being made to accommodate more than 2500 delegates.

The exhibition area will be one of the highlights of the conference. Exhibiting provides tremendous benefits to both participating industry and the society. Tea, coffee and lunch will be served confluent with the trade area to allow optimal interaction between the trade companies and delegates during beverage and lunch breaks.

We invite you to participate in the Fertivision 2019 and exchange your expertise with more than 2500 specialists in the field of Assisted Reproduction.

We look forward to your active participation and suggestions for successful conduct of the conference.

With Our Best Regards

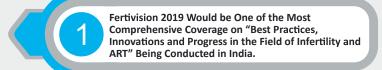


Dr. M Gouri DeviOrganizing Chairperson
FERTIVISION 2019



Dr. Pankaj Talwar Organizing Secretary FERTIVISION 2019

Scientific Highlights



We Promise You Cutting Edge Academic Deliberations
Delivered by Leading Renowned Expert Faculty from
Around the world befitting the Theme of the Meeting
"Beyond tomorrow"

In the Conference There Would Be 4 Simultaneous Halls Running with Legendary Faculty in Lead Interacting With You, Covering a Wide Variety of Topics, and Enabling You to Tailor the Program Especially to Your Area of Interest and Clinical Practice. We are Having a Dedicated Hall for the Esteemed Embryologist Friends.

Along With the Main Conference We are Having 9 Pre -Congress Workshops on 6th Dec 2019 Pertaining to the Burning Issue in ART.

We Welcome You and Offer You This Opportunity to Showcase Your Research Work on a Prestigious National Platform and Enhance Your CV.

Scientific Quiz for sharp talented young minds with primary rounds conducted by various IFS Chapters across the country and abroad

Several Prizes and Awards for Best Paper, Poster and Quiz winners

Enjoy the Evenings With Exciting Social and Cultural Program

Sightseeing Tours in and Around Delhi Organized Professionally by Leading Event Management Teams.

A Great Opportunity for All of Us to Amalgamate the Most Updated Current Standards in Our Clinical Practice and Look Beyond Tomorrow

Choose from 10 Pre Conference Workshops | 6 December

_			
1)	IFFS Workshop on Do's and Don'ts in Ovarian Stimulation	7)	Total Quality Management
2)	Reproductive Surgery		Pre Lunch Workshop (0900 - 1300 Hrs)
3)	Ultrasonography Imaging In Infertility	8 A)	Holistic Medicine and Patient Counselling
4)	Andrology & Semenology		Post Lunch Workshop (1400 - 1700 Hrs)
5)	Ovum Pickup and Embryo Transfer (With Simulators)	8 B)	Publish or Perish
6)	Cryobiology	9)	PGT and Genomics

Registration Details

St September Category	Early Bird Fees Till 1st September 2019		Regular Till 15th Oct		Onspot	
IFS Member	INR 10500		INR 12500		INR 14500	
Non IFS Member	INR 12500		INR 14500		INR 16500	
Conference Registration	Embryologist	INR 14500	Embryologist	INR 16500	Embryologist	INR 18500
plus Life Time IFS Membership	Gynaecologist	INR 15500	Gynaecologist	INR 17500	Gynaecologist	INR 19500
PG Students (No Dinner)	S Students (No Dinner) INR 6000		INR 7000		INR 8000	
Accompanying Person	INR 10500		INR 11500		INR 12500	
Foreign Delegates	\$ 350		\$ 400		\$ 500	

Inclusive of 18% GST













The Leela Ambience Hotel & Residences is located on the fringe of the Gurgaon Central Business District, fifteen minutes from Delhi's International Airport and thirty minutes from Central Delhi.

In addition to 322 contemporary and world class five star deluxe rooms and suites, The Leela Ambience Gurgaon also features 90 residencies (with one, two and three bedroom) fully serviced luxury Residences.

Multi Award winning restaurants include; Multi-cuisine all day dining—Spectra, Italian—Zanotta, cuicina Italiana, North Indian—Diya and whisky bar-Rubicon. The "Royal Club" is located on the 6th floor of the Hotel. The Royal Club features are 24 hour butler service, with evening cocktails and a Boardroom.

The 27,000 square feet, beautifully finished convention facilities, meeting and boardrooms were recently awarded the prestigious 5-Star deluxe "Best Luxury Hotel and Conference Centre – India".

This venue has been chosen with a lot of care and thought keeping in mind the comfort and also enjoyment of the delegates when visiting Delhi.

Conference Secretariat

Indian Fertility Society

302, 3rd Floor, Kailash Building, 26, Kasturba Gandhi Marg C.P, New Delhi - 110001 +91-9667742015, +91-9899308083 +91-11-40018184

Conference Manager



Conferences International

Mr. Sumeet Ghai B-220/2, 2nd Floor, Opposite Kali Masjid, Savitri Nagar New Delhi – 110017

Mobile: +91 9560493999

Annual Congress of Indian Fertility Society

6-8 December The Leela Ambience Hotel Gurugram, New Delhi, NCR | India



Registration Form

Title Prof/ Dr/ Mr/ Ms				Gen	der: Maie_	_ remaie			
First Name	11	Last N	Name						
Institution	- 12	IFS Member No							
Correspondence Address					A	4. Ť			
City P	in Code	6		State		. +			
Mobile No.		Email							
www.						are mandatory)			
imited Choose from Seats	om 9 Pre Co	nference W	orkshops	6 December	er Choose	Any 1 Worksho			
1) IFFS Workshop on Do	's and Don'ts in Ov	arian Stimulatior	7) Total Quality Management						
2) Reproductive Surg	Reproductive Surgery				Pre Lunch Workshop (0900 - 1300 Hrs)				
3) Ultrasonography In	Ultrasonography Imaging In Infertility				8 A) Holistic Medicine and Patient Counselling				
4) Andrology & Seme	Andrology & Semenology				Post Lunch Workshop (1400 - 1700 Hrs)				
5) Ovum Pickup and Er	Ovum Pickup and Embryo Transfer (With Simulators)				4 <u> </u>				
6) Cryobiology			9) PGT and Genomics						
	Registration Early Bird Fees Till 1st September 2019		Regular Fees Till 15th October		Inclusive of 18% GS Please tick the appropriate checkbox Onspot				
Category									
IFS Member	INR 105	00	INR 1250	00	INR 14	500			
Non IFS Member	INR 12500		INR 1450	INR 14500		500			
Conference Registration	Embryologist	INR 14500	Embryologist	INR 16500	Embryologist	INR 18500			
plus Life Time IFS Membership	Gynaecologist	INR 15500	Gynaecologist	INR 17500	Gynaecologist	INR 19500			
PG Students (No Dinner)	INR 6000 INR 10500		INR 7000 INR 11500		INR 8000 INR 12500				
Accompanying Person									
Foreign Delegates	\$ 350		\$ 400		\$ 500				

Inclusive of 18% GST

Conference Registration Fees Includes

- 18 Hrs of World Class Academic Program with Access to Best & Brightest International & National Faculty
- 3 Lunches and 6 Tea / Coffee Served During the Conference on 6, 7 & 8 December
- Banquet Dinner on 7 December
- Conference Kit (Including Bag, Badge, Notepad, Certificate & Pen)
- 1 Pre Conference Workshop
- Accompanying Person is Entitled for Food Coupons Only

Cancellation Policy

- Cancellation till 31st October, 2019 50% Refund.
- Cancellation from 1st November, 2019 No Refund.
- All refunds will be made after the congress.

C	he	qu	e /	Draft	No	٠(

Total Amount

Note: Kindly email us bank deposit slip / UTR number once you made the payment for our record. Payment confirmation will take 7-10 working days post deposit of cheque, DD or RTGS

3. To Register online log on to www.fertivision2019.com

Mode of Payment

- 1. Bank Draft/Cheque To be made in favor of "INDIAN FERTILITY SOCIETY"
- 2. Bank Transfer Details

IFS Account Name: Indian Fertility Society Account Number: 50562010067180

IFSC Code: ORBC0100179

Bank Name: Oriental Bank of Commerce Branch: Connaught place, New Delhi- 110001

Congress Manager's



Mr. Vikas Sharma **Conferences International** B-220/2, 2nd Floor, Opposite Kali Masjid, Savitri Nagar

New Delhi - 110017 M: +91-9560493999

Email: fertivision2019@gmail.com



Turnkey Solutions for IUI-IVF-ICSI

Looking for your Own IVF Lab setup?

<u>Biocell Enterprise</u> offers "One Stop Shop" solutions for all your needs in ART

We provide complete hand holding support to setup your very own IVF (ART) centre.

Services offered:

- > Site visit & Lab design assistance
- > Supply & Installation of high end IUI-IVF-ICSI equipment
- > Supply of Labware & Consumables
- > Supply of entire range of IVF media
- > IVF Lab Quality Control services
- Clincal and Embryology Support
- > Trainings
- > AMC & After Sales Support

For any query or information please contact us at:

Mobile: +91 9891470707

Email: biocellenterprise@gmail.com