

ENDOMETRIAL POLYPS

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

Dr. Kanthi Bansal

M.D., D.G.O., F.I.C.O.G.

Safal Fertility Foundation

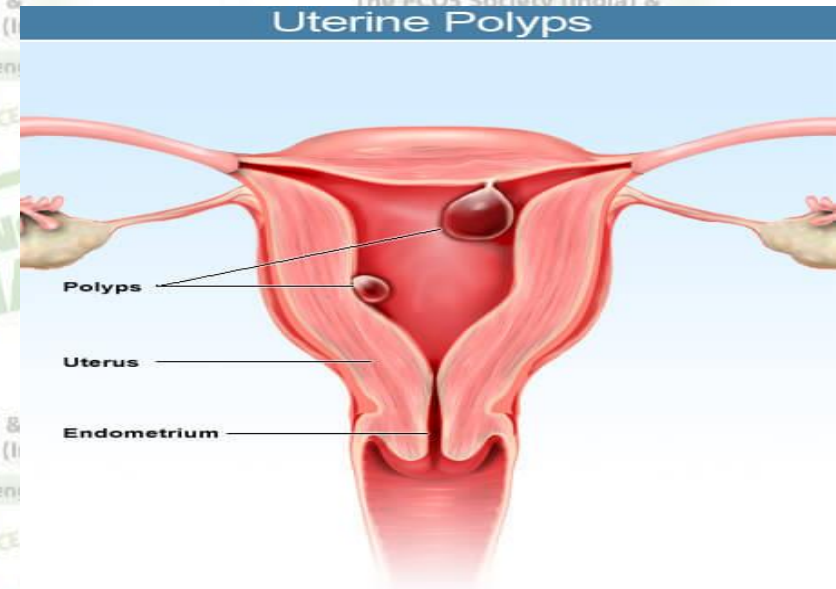
Ahmedabad, Gujarat

Introduction

- An endometrial polyp or uterine polyp is a mass in the inner lining of the uterus
- Large flat base (sessile) OR
- Attached to the uterus by an elongated pedicle (pedunculated)
- Pedunculated polyps are more common than sessile ones
- Pedunculated poly protrudes through the cervix and into vagina through a blood vessel
- Ranges in size from a few millimeters to several centimeters, grows in response to estrogen
- There can be a single or multiple polyps

- Endometrial polyps are usually benign
- But sometimes can be cancerous
- Precancerous changes called endometrial hyperplasia or uterine cancers may appear as uterine polyps in 5% of postmenopausal women, but occur in only 1% of young women with polyps

Oxford 2009



Risk Factors

- Polyps more commonly occur in older women & in postmenopausal women
- Rarely occurs in young women
- Prone to:
 - Women with irregular menstrual cycles
 - Polycystic ovarian syndrome (PCOS)
 - Obesity with high blood pressure

Gynecol Endocrinol 2006

Definition

- Benign localised overgrowth of endometrial glands and stroma, covered by epithelium, projecting above the adjacent epithelium

Classification

- Morphologically diverse lesions that are difficult to subclassify
- Most are either hyperplasic, atrophic or functional.
 - Hyperplasic
 - resemble diffuse non polyploidy endometrial hyperplasia
 - no evidence that these have the same significance as diffuse hyperplasia, so best to avoid the term hyperplasic in the diagnosis
 - Atrophic
 - low columnar or cuboidal cells lining cystically dilated glands
 - typically in post-menopausal patients
 - Functional
 - resemble normal cycling endometrium
 - relatively uncommon

Signs and symptoms

- Asymptomatic
- Irregular menstrual bleeding
- Bleeding or spotting in between periods
- Post coital bleeding
- Heavy bleeding
- Dysmenorrhea: This may occur when the polyp protrudes through the cervix and into vagina
- Infertility
- Bleeding or spotting after menopause

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

- Polyps are associated with infertility
- Prevent the implantation of an embryo
- Increase the risk of miscarriage

Hum Reprod 2008

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

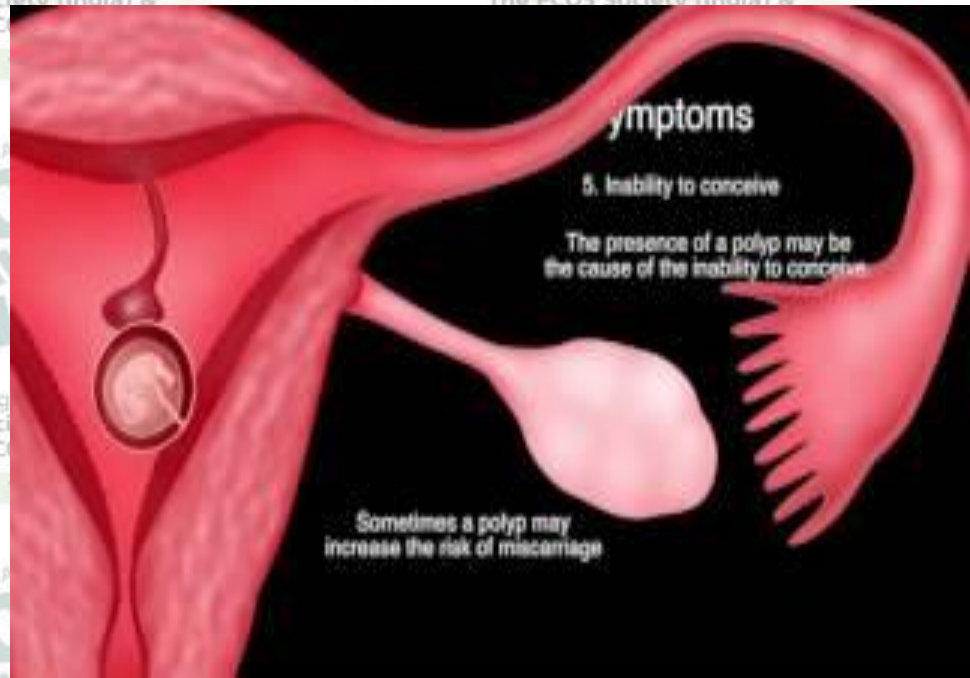
Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 -

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

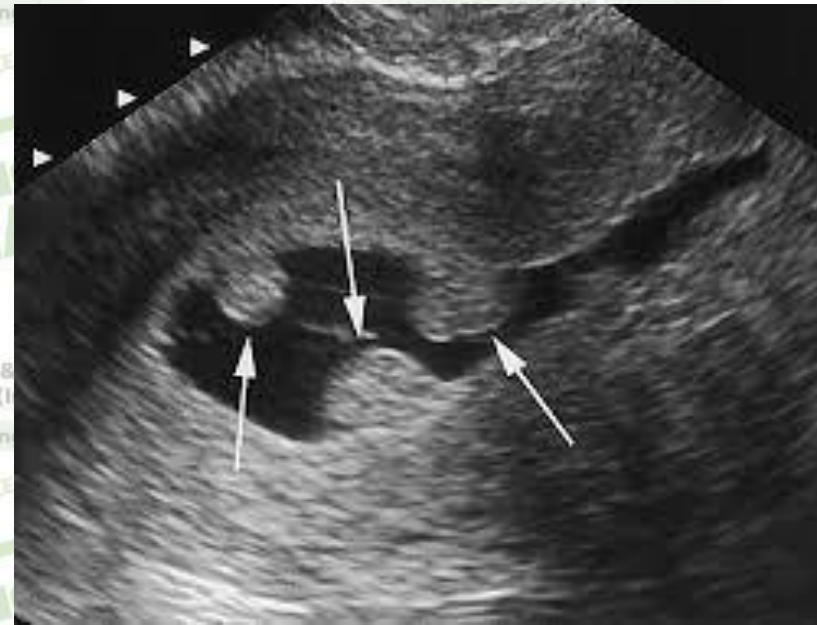
Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 -



Diagnosis

- Transvaginal ultrasound
- Sono Salpingography
- Hysterosalpingogram
- Hysteroscopy



Differential Diagnosis

- **Endometrial hyperplasia**
 - diffuse process, majority of fragments in curettage, absence of thick walled vessels
- **Polypoid endometrial carcinoma**
 - malignant epithelial cells
- **Adenofibroma**
- **Adenosarcoma**
 - stromal cells cytologically atypical & mitotically active
 - stromal cells packed tightly around non malignant glands
 - leaf like pattern

AUB

- Endometrial or uterine polyps are very common in reproductive-age women
- One of the most common causes of abnormal uterine bleeding, such as bleeding between periods.

Study: Polycystic ovary syndrome and increased polyp numbers as risk factors for malignant transformation of endometrial polyps in premenopausal women

CONCLUSION:

- The presence of irregular vaginal bleeding was not a predictor of malignancy in the polyp
- Premenopausal women with PCOS and those with 2 or more polyps had an increased prevalence of polyp malignancy
- These groups of patients, whether symptomatic or not, should be evaluated by hysteroscopic resection of the polyps

Int J Gynaecol Obstet. 2011 Mar

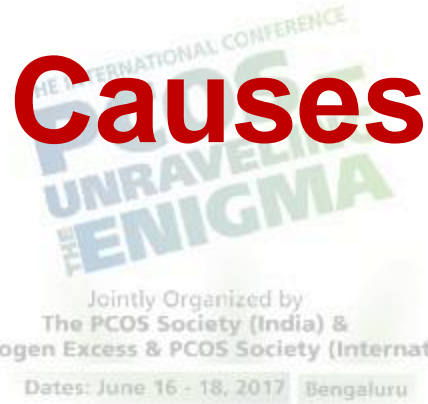
Epub 2011 Jan

Increased prevalence of endometrial polyps in a venezuelan population of PCOS women

- Endometrial polyps are more frequently found in PCOS women than in control ovulatory, non obese non hirsute women.
- Careful evaluation of endometrial thickness and cavity must be performed in this population of women.
- In cases of long-term infertility due to PCOS, an extra level of diagnostics opted to rule out endometrial polyp
- Polyps are likely in presence of overweight, longer menstrual cycles and a higher waist to hip ratio

Causes

- Excessive Estrogen:
 - PCOS
 - Breast fibroids
 - Uterine fibroids
 - Endometriosis
 - Breast cancer
- Menarche
- Tamoxifen
- Obesity
- Low levels of the hormone progesterone
- Hormone replacement therapy
- Age
- Chronic Inflammation
- High Blood Pressure



Excessive Estrogen

- Uterine polyps are rarely diagnosed before menarche
- Obese women
- Excess levels estrogen over-stimulate the endometrium and play an important role in the formation of polyps
- PCOS women
- Women having ovulation induction for infertility, have higher levels of estrogen brought about by ovulation induction can leads to polyps

- **Menarche:** Estrogen levels rise
- **Tamoxifen:** Women who take this medication (designed to interfere with estrogen levels in the body) have a 30 to 60 percent risk of developing polyps
- **Obesity:** Body fat cells produce estrogen, the more fat, the higher the levels of estrogen in the body.
- **Low levels of the hormone progesterone**
- **Hormone replacement therapy can increase levels of estrogen.**
- **Hormone contraceptives:** Use of progesterone-only contraceptives such as the IUD device(Mirena), OCPs or the combined oral contraceptives may reduce the risk of polyps.

• Age

- Incidence rate of endometrial polyps ↑es with age
- Occur in perimenopausal women between the ages of 40 & 50
- After menopause, the incidence rate starts to lower again

• Chronic Inflammation

- Uterine polyps may be a response to irritation or inflammation of the wall of the uterus
- Chronic inflammation seems to present a stronger case for causing cervical polyps

• High Blood Pressure

- High blood pressure is one of the risk factors for cervical polyps
- 2008 study published in American Journal of Obstetrics and Gynecology did not find an association between uterine polyps and blood pressure levels

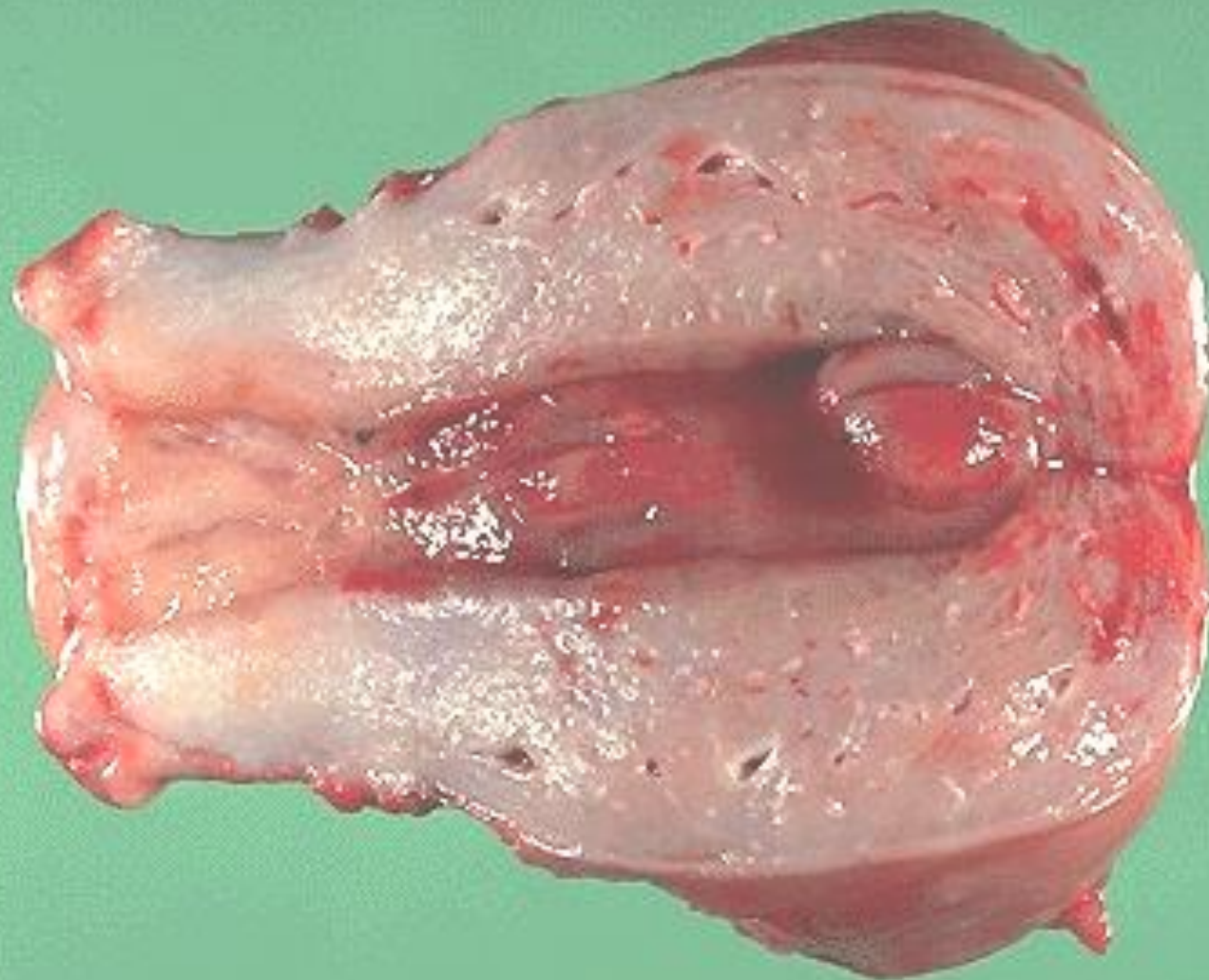
Histopathology

- Irregularly outlined glands that may be out of phase with endometrium
- Fibrovascular stalk or fibrous stroma with numerous thick walled vessels
- Metaplastic epithelium particularly squamous may be present
- Those in the lower uterine segment may contain endocervical glands

PATHOGENESIS

- **Monoclonal endometrial hyperplasia**
- **Overexpression of endometrial aromatase , and gene mutations**
- **Polyps have characteristic cytogenetic rearrangements**
- **Rearrangements in the high-mobility group (HMG) family of transcription factors appear to play a pathogenic role**

Polyp



cm | 1 2 3 4 5 6
SPECIMEN 5-3413-83 DATE 8-18-83

Management of Polyps

- Watchful waiting
 - Small, asymptomatic polyps might resolve on their own
 - Follow up for 3-6 months
- Medication management
 - Hormonal medications: Progestins , GnRH agonists
 - Short-term effect at best
 - Will reappear when the hormones are stopped
- Surgical removal
 - Hysteroscopy
- Curettage

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017



Endometrial polyp

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess Society (International)

Dates: June 7-8, 2017
Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

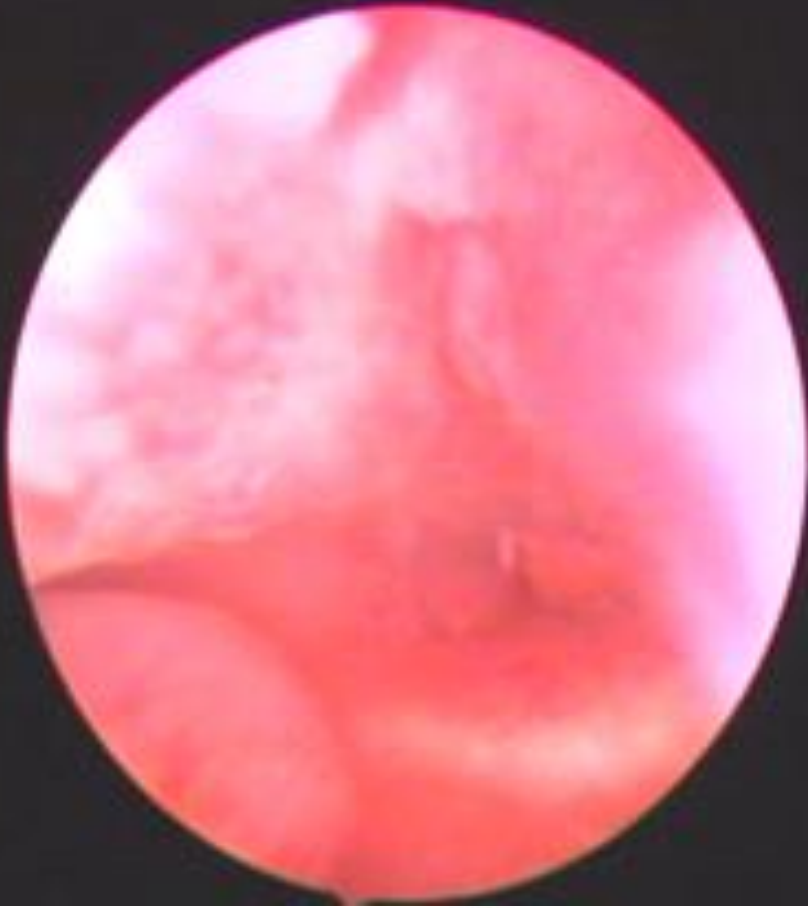
Jointly Organized by
The PCOS Society (India) &
The Androgen Excess Society (International)

Dates: June 7-8, 2017
Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess Society (International)

Dates: June 7-8, 2017
Bengaluru



THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess Society (International)

Dates: June 7-8, 2017
Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess Society (International)

Dates: June 7-8, 2017
Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 | Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 | Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 | Bengaluru



THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 | Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 | Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 | Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA


Post Operative Management

- If histopathology report states that the polyp is benign, then regular follow up is necessary to ensure that it does not recur
- Rarely polyps recur
- If the polyps are pre cancerous or cancerous then further treatment will be necessary

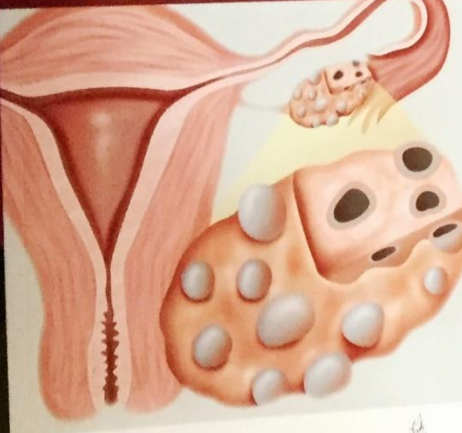
Current Concepts in
**Obstetrics, Gynecology &
 Infertility Update 2017**

Editors:
 Atul Munshi | C. B. Nagori | Kiran Desai | Kanthi Bansal


visit our website www.jaypedbrothers.com, for detailed information on obstetrics & gynecology books, visit our website www.jaypedbrothers.com





**Decoding
 Polycystic Ovarian
 Syndrome (PCOS)**



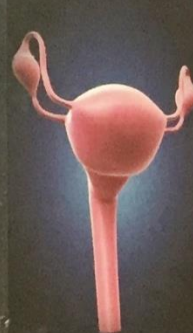
Kanthi Bansal
 Pooja Sharma Dimri
 Apoorva Pallam Reddy



A HANDBOOK OF
**INTRAUTERINE INSEMINATION
 and
 IN VITRO FERTILIZATION**



**Manual of
 ENDOMETRIOSIS**



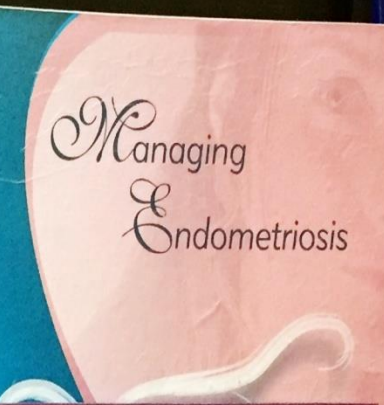
Kanthi Bansal

Federation of Obstetric & Gynaecological Societies of India

Foreword
 Roy Homburg


JAYPEE

*Managing
 Endometriosis*




Kanthi Bansal
SECOND EDITION

Manual of
**Intrauterine Insemination (IUI)
 In Vitro Fertilization (IVF)
 and Intracytoplasmic
 Sperm Injection (ICSI)**

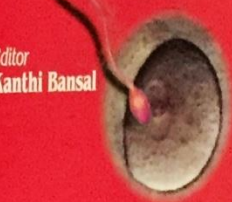


JAYPEE

A manual of IUI



**Practical Approach to
 Infertility
 Management**



Editor
 Kanthi Bansal

JAYPEE

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru



Thank

You

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

Jointly Organized by
The PCOS Society (India) &
The Androgen Excess & PCOS Society (International)

Dates: June 16 - 18, 2017 Bengaluru

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA

THE INTERNATIONAL CONFERENCE
PCOS - UNRAVELING THE ENIGMA