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#### VOLUME 1 NO 4

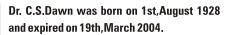
Newsletter of Indian College of Obstetricians & Gynaecologists

Campus

### Dr. C. S. Dawn

2004

A Tribute — Dr. Rohit Bhatt, Chairman, ICOG



Dr. Dawn inherited all noble traditions and spirit dedication for empowerment of women. He had a very successful undergraduate career in medicine and secured 15 Gold medals, many prizes and scholarships. Dr. Dawn qualified for doctorate in Medicine, doctorate in philosophy and finally the Fellow of the Royal College of Obstetricians and Gynecologists. He remained Professor and Head of the Ob. Gyn department at Eden Hospital and R.G.Kar Medical College in Kolkata from 1969 to 1984. He was the recipient of the Dr. B.C.Roy National award in 1981 as an eminent teacher. Dr. Dawn was the president of FOGSI in 1983-84. He was also the vicechairman and then the Chairman of the Indian College of Obstetrics and Gynecology. Dr. Dawn represented FOGSI at the FIGO Executive Board for three years. He was the Founder President of the National Association for Voluntary Sterilization and Family Welfare of India (NAVSFWI), now designated as NARCHI. Dr. Dawn founded the Indian College of Maternal & Child Health and established teaching centers throughout India. Dr. Dawn became a celebrity, not only in India but also in most countries in Southeast Asia for his famous textbooks of Obstetrics and Gynecology. Even today these books are considered as a "Bible' by students. Dr. Dawn remained the author of these books from 1958 to 2003 a period of 45 years. Very few authors have this record of publishing a

He was a prolific writer. He has written books not only for medical persons but he has written many books for women giving useful instructions on maintaining quality health. He

textbook for 45 years in the lifetime.

had a special soft corner for rural women and throughout his life he nurtured this concept in his talks and action.

Dr. Dawn remained a crusader for health of women and children. He enunciated the guidelines for pregnant women- now known as "Dawn's Rule of Ten" He remained a life long teacher compassionate to his students and patients. He knew most of his students by first name and guided them to be good doctors. He had a special knack of making friends and recognizing the hidden talents in them. Dr. Dawn offered several prizes to encourage young talents at FOGSI Conferences. He would give due importance and recognition to his friends and colleagues in the profession. The Indian College of Maternal and Child health will remain a permanent memorial for Dr. Dawn.

Not only did he excel in academic field but he was a fine gentleman, affectionate and congenial person too. Young or Old had direct access to him and he would listen and give his honest opinion. He remained a loving husband and affectionate father. My thoughts go to Aartiben, his wife who remained a willing partner in his crusade for upliftment of women. She devoted all her time and energy for Dr. Dawn. I pay my tribute for her devotion and sacrifice. Dr. Dawn's last appearance at FOGSI conference was in Agra in January, 2004 when he was honored as former chairman of Indian College of Obstetricians and Gynecologists.(ICOG). The Indian College of Obstetricians and Gynecologists will long remember Dr. Dawn for his endeavor and dedication for the College and FOGSI

May his soul rest in peace

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ICOG cannot accept responsibility for the correctness or the accuracy of the opinions expressed by the contributors

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# **ICOG CME** 2004





Kottayam ICOG CME





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Bellary ICOG CME

Satara ICOG CME

#### Forthcoming ICOG CME 2004-2005

10.000		
Societies	Programme	Dates
Aligarh		Not final
Bhagalpur		Not final
Bihar		September 2004
Muzaffarpur	Dr. C. S. Dawn CME	30th & 31st October 2004/ 6th & 7th November 2004
Pune		Not final
Patiala		Not final
Rewari		May/July/August 2004
Tirupati	Dr. C. S. Dawn CME	7th & 8th August 2004
Yavatmal	Dr. C. S. Dawn CME	Not final

 ${\it Newsletter} \ of \ {\it Indian} \ {\it College} \ of \ {\it Obstetricians} \ \& \ {\it Gynaecologists}$ 

## **Episiotomy**



— *Dr. Hrishikesh Pai*Chairman Genetics & Fetal Medicine committee FOGSI
Treasurer Mumbai OBGYN Society
Member Managing Council ICOG
Secretary IAGE
Consultant Gynecologist, Lilavati
Hospital, Mumbai.

Episiotomy may be defined as an incision on the pudenda or perineum.

#### There are two types of Epsiotomies:

Median or midline episiotomy: In this the incision is made in the midline.

Mediolateral episiotomy: In this the incision begins in the midline, but is directed downwards & laterally, away from the rectum.

#### Timing of Episiotomy:

It is a common practice to perform an episiotomy when the head is distending the perineum, and is visible during a contraction to a diameter of at least 3 to 4 cm. In case of an operative forceps delivery, it is best to perform episiotomy after the application of the blades. If performed too early, it may result in unnecessary blood loss. On the other hand, if done too late, it may result in unavoidable perineal lacerations, thus defeating the very purpose for which it is being done.

#### Indications for episiotomy:

**Routine use** in all primigravidas undergoing vaginal delivery:

In the past most women having their first baby were subjected to an episiotomy. The reason for its use was the good alternative of a straight ,proper surgical incision & repair compared to the ragged lacerations that may occur in case of episiotomy not being performed. The added benefits were of the decrease in postoperative pain, better healing & decreased incidence of postpartum prolapse & urinary incontinence.

**Selective use** of episiotomy: This is being more frequently performed. Those women having the following difficulties are selectively subjected to an episiotomy:

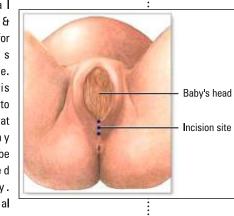
- a. Shoulder dystocia
- b. Breech delivery

- c.Operative vaginal delivery:
  forceps/vacum
- d. Occipito posterior position

#### Routine Versus Selective episiotomy:

Numerous studies including Cochrane Pregnancy & childbirth registry 2000 has shown that there was less posterior perineal trauma, less need for repair and better healing in the Selective episiotomy group. Routine episiotomy also tended to contribute to anal sphincter incontinence by increasing the risk of third & fourth degree perineal tears. Even compared with spontaneous perineal tears, episiotomy tripled the risk

of fetal incontinence & doubled it for flatus incontinence. Hence it is reasonable to conclude that episotomy should not be performed routinely. (Eason et al 2000)



## Midline Versus Mediolateral episiotomy:

The midline episiotomy is easy to perform, has minimal blood loss & postoperative pain, has excellent anatomical approximation & healing & rarely causes dyspareunia. However the main drawback of midline episiotomy is the increased incidence of third & fourth degree perineal tears..Many practitioners worldwide tend to use the midline episiotomy ,barring those in which they feel that there is higher incidence of third & fourth degree perineal tears. However in our country, there is a tendency to perform mediolateral episiotomies.

#### Repair of an Episiotomy:

It is best to perform repair after the placenta is delivered and all maneuvers such as tracing of the cervix, repair of cervical tears & the rare manual removal of placenta are over. The surgical principals of heamostasis & anatomical repair without excessive suturing is

essential prerequisite to success. The suture material may be 3-0 chromic catgut or 3-0 polyglycolic acid. The vaginal mucosa is sutured first, followed by approximation of perineal muscles deep & superficial). The skin may be closed by interrupted of subcuticular stitches. Although the newer suture materials ,give a better postoperative recovery, one may have to remove an occasional suture knot ,which may be causing chronic irritation.

Occasionally the episiotomy does not heal, resulting in wound dehiscence or "gaping". There is higher incidence of gaping in patients with hematomas, infection, & generalized medical debility.

It is prudent practice
to use local
antiseptic creams
for accelerated
healing so that such
gaping can be
prevented. Zinc
recently has been
scientifically proven
to be useful as an
antiseptic as well as
a n immunopotentiator, though

most of us had already recognized its efficacy in the healing process of ulcers. Silver sulphadiazine has been in use for local dressing of burns to specifically control gram-negative bacteria. But zinc sulphadiazine possesses all the benefits of silver sulphadiazine and offers additional advantage to local wound healing.

#### Postoperative care:

- 1. Postoperative antibiotics may be given, especially if there is extension into the anus.
- 2. Ice packs, antiseptic creams and pain killers may be given to reduce pain
- 3. A stool softener may be given to allay discomfort during defecation.
- 4. It is important to keep a watch on postoperative haematomas, or infection especially in case of persistent pain.

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Newsletter of Indian College of Obstetricians & Gynaecologists

# "Sacral-Rhomboid dimensions:

## What is their value in " modern Obstetrics"

- Dr. Neera Agarwal
Prof. & Head Obst. & Gynec.
University college of Medical Sciences
and GTB Hospital, Delhi
2nd Vice president FOGSI

One of the important causes of maternal mortality and morbidity and a high fetal loss in a case of neglected labor is cephalopelvic disproportion which complicates 5-15% of deliveries, the prevalence varying according to geographic location to nutritional level of population concerned (1). In a developing country like India where only 40% of pregnancies are supervised by any level of

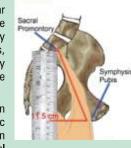
health workers only a privileged few have access to tertiary health services during delivery. It is thus essential to identify the condition of cephalopelvic disproportion in all those women who avail health services of any level during pregnancy. A technique is needed that is simple enough to be used by minimally trained health personnel, is cost effective, safe and reasonably accurate to predict pelvic disproportion for the timely referral of a woman to a well equipped centre.

At present the onus of diagnosis of cephalopelvic disproportion lies on the assessment of pelvic adequacy in relation to fetal size using internal pelvic assessment by a skilled obstetrician, requiring expertise (2). Other methods used involve pelvimetry by imaging techniques like X-rays, computed tomography, magnetic resonance imaging and ultrasonography. The practical use of these methods is limited because of high cost, radiation exposure, requires high expertise and limited accuracy.

Michaelis Sacral Rhomboid was first described by Adolf Guster Michaelis as a gauge of pelvic adequacy as its size and shape differed in women with and without contracted pelvis (3). He reported this variation to be of prognostic significance in only the grossly deformed pelvis.

Sacral rhomboid is a quadrangular area overlying the lower back or the sacrum and bounded laterally by posterior superior iliac spines, above by L5 vertebra and below by upper end of natal cleft. The measurable dimensions include

Transverse diagonal: distance in cms between two posterior iliac spines marked as protuberances on the dimples overlying the gluteal region.



**Vertical diagonal:** distance in cm between the L5, corresponding to upper border of sacrum, and uppermost point of natal cleft.

During the last several years usefulness of these dimensions in identifying high risk pregnancies has been poorly explored. It was in 2000 that Hubert liselele et al (4) studied the dimensions of sacral rhomboid in a large number of African women and reported that transverse diagonal of was significantly less in disproportion group. Values less than 9.5 cm increased relative risk by 7.0 times. As per our own study carried out recently (5) in 300 Indian primigravid women the dimensions of sacral rhomboid were found to be significantly smaller in women with pelvic inadequacy. The statistical analysis demonstrated that transverse diagonal of  $<\!9.5$ cm and vertical diagonal of  $<\!10.5$ cm carried the predictive value of 66% and increased the risk of cephalopelvic disproportion by 7.5 and 2.7 times respectively. On combining these two parameters the predictive value further improved and detected one out of two women with inadequate

#### : pelvis.

The assessment of sacral rhomboid dimensions is an extremely simple, cost effective, harmless and reasonably accurate technique. It has a smaller learning curve (about one week) and can be advocated for use at community level. The values of <9.5 cm and <10.5 cm of transverse and vertical diagonal respectively can be taken as cut off values for identifying pelvic inadequacy. These patients can be referred to tertiary level centres.

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# disproportion in primigravid Indian women. Under Publication Book Review - Dr. Mandakini Parihar

## "Current Issues in Obstetrics and Gynecology" by Dr. (Mrs) SN Tripathy

This is a very well written and precise book about the major topics of current interest in Obstertrics and Gynecology. With the emerging changes in our specialty it is important that we keep updated and informed about the recent trends in clinical practice. This book helps the busy practitioners to keep abreast with the newer modalities of management of common conditions.

Special emphasis on tuberculosis and breast diseases along with all other topics are well chosen by the editor and the contributors have presented their chapters very well. The presentation style of the book is good and with a glance the reader can go to the desired chapter. The headings and subheadings are very appropriate and make remembering the topic easy for the reader. The diagrams and the tables are simple and to the point and make it very pleasant reading. It makes good reading material for the undergraduate and post graduate students and covers a wide variety of topics.

#### Contd. from Pg. 3

- 12. Women should be advised that the most likely cause of IUD failure is expulsion. The risk of this happening is around 1 in 20 and is most common in the first year of use, particularly within 3 months of insertion.
- 13. Women should be offered instruction on how to check for the IUD and its threads and advised that if they are unable to feel them it may be that the device has been expelled. Alternative contraception should then be used until medical advice has been sought.
- 14. Women should be informed that menstrual abnormalities (including spotting, light bleeding, heavy or longer menstrual periods) are common in the first 3-6 months of IUD use.
- 15. A chaperone should be offered to all women having a pelvic examination and the offer documented in the case notes, together with the chaperone's identity, if accepted.
- 16. Details of pre-insertion counselling and the insertion procedure should be clearly documented in patient records .
- 17. A follow-up visit should be advised after the first menses, or 3-6 weeks, after IUD insertion.

Newsletter of Indian College of Obstetricians & Gynaecologists

# The WHO selected practice recommendations for **Contraceptive Use**

Faculty of Family Planning and Reproductive Health Care www.who.int/reproductive-health

#### **FFPRHC Guidance**

#### **Emergency Contraception (April 2003)**

#### Recommendations

- 1. EC should be started as soon as possible and within 72 hours of unprotected sexual intercourse (UPSI) or potential contraceptive failure
- 2. Currently in routine practice, one tablet containing 0.75 mg LNG should be given and repeated 12 hours later. Ideally, the second dose of Peroral Emergency Contraception (POEC) should be taken 12 hours after the first. However, the interval between doses may be up to 16
- hours if this improves compliance.

  3. In situations where patient compliance is likely to be poor, POEC may be given
- as a single dose of 1.5 mg LNG.

  4. A copper IUD can be inserted up to 5 days after the first episode of UPSI or up to 5 days after the expected date of ovulation in a regular cycle.
- 5. POEC can be used more than once in a cycle only if clinically indicated, but not more than twice.
- 6. Women should be instructed to return

for a pregnancy test if their expected menstruation is more than 7 days late, or lighter than usual.

7. POEC does not provide contraceptive cover for the remainder of the cycle and effective contraception or abstinence

8. Professionals should present the evidence of the effectiveness and need for EC in individual situations to allow women to make an informed choice regarding its use.

must he advised

9. There are no absolute

contraindications to the use of POEC but caution should be used in women with porphyria or severe liver disease.

10. If vomiting occurs within 2 hours of taking either dose of POEC, a further dose, anti-emetics, or an IUD should be advised.

11. Providers of family planning and sexual health services should work together with other providers and local health authorities to collect data on use of EC and

pregnancy rates. Advanced provision of POEC and instructions on use can be offered to those attending family planning and sexual

health services

The Copper Intrauterine Device as Long-term Contraception (January 2004)

#### Recommendations

- 1. After counselling, an IUD is a safe contraceptive choice for the majority of women.
- After counselling about other contraceptive methods, women who are assessed as at higher risk of STI may still

choose to use an IUD.

3. Women who are HIV-positive may be offered an IUD after testing for bacterial STIs (Grade B). There are no drugs that are known to affect IUD use and efficacy.

4. A bimanual pelvic examination should be performed before inserting an IUD.

5. Pulse rate should be measured and documented post-IUD

6. Prophylactic antibiotics are not recommended for routine IUD insertion.

- 7. Women should be informed that the primary mode of action of an IUD is prevention of fertilization & implantation.
- 8. Women should be advised of the low failure rate of IUDs, i.e. around 1%.
- 9. Women should be informed of the symptoms of pelvic infection and advised how and where to seek medical help if these occur, particularly in the first 3-4 weeks after insertion.
- 10. Women should be informed that the overall risk of ectopic pregnancy is reduced with IUD use compared to using no contraception
- 11. Women may be informed that previous use of an IUD does not affect fertility.

Contd. to Pg. 6

# From the **Editor's** desk - Dr. Duru Shah



Dear friends,

Modern Science is galloping and as clinicians, we need to keep ourselves updated so as to offer the best healthcare to our

patients. Unfortunately in India we do not have to renew our licenses in order to continue our medical practice. Yes, most of us voluntarily do attend seminars, workshops and conferences to keep abreast of technology and advances in our field. But at the same time, there are some clinicians who still follow what they learnt during their training days, which may not be the ideal in the context of modern medicine.

In the developed countries, our contemporaries have to regularly renew their licenses based on the credit hours they have collected every year. If their target is not met, their licenses are not

renewed, forcing them to shut their clinical doors till they are ready with their requirements. We anticipate, that soon our Medical Council will insist on us to renew our licenses. In such a scenario it is in our personal, professional and national interest to do right before we are forced to

ICOG aims at offering accreditation to the various CME activities conducted through ICOG and FOGSI. These credit hours could be accumulated by the delegates attending the activity. If any scientific program is forwarded to ICOG, based on the quality of the program, ICOG could give it accreditation for a certain number of hours. This could be printed on the program of the event (conference, seminar, workshop). This would encourage more delegate participation, which would be truly appreciated by the organizers. Simultaneously the delegates would benefit, as they would collect certificates of credit hours they have obtained. Hopefully, most of us would collect many credit hours and would be already in tune with the MC1 requirements.

The above is a thought which I would like to see being put into practice through ICOG. I would appreciate your comments and suggestions on this. These suggestions would be very valuable in helping me to take it forward. I hope to hear from you very soon on the burning question "Will Accreditation of Scientific Sessions by ICOG help our members?"

We plan to publish your letters in the next issue of this newsletter. You could respond by email on www.icogonline.org.

Till then, wishing you a delightful time during the monsoon.

Warm regards,

Yours sincerely



Newsletter of Indian College of Obstetricians & Gynaecologists



This is a Correspondence CME. Please read it carefully. You may answer the accompanying questions and send your answers to Dr. Sanjay Gupte. If you wish to collect Credit Points, please request him to grade it for you. Only ICOG members are eligible to collect Credit Points. This is an innovative educational program for those who are not able to attend CME's and Conferences.



Correspondence Course

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### Insulin resistance in polycystic ovarian syndrome



Dr. Duru Shah

Program Director - Melbourne IVF, Mumbai sultant, Obs& Gyn - Breach Candy Hospital, Jaslok Hospital and Research Centre, Sir HN Hospital and Research Center



Dr. Mandakini Parihar

Chairperson, Family Welfare Committee, FOGSI Hon. Associate Prof Obs and Gyn, KJ Somaiya Medical College, Director, Mandakini Fertility Clinic and IVF Centre

Jt. Secretary, Navi Mumbai Obstetrics & Gynaecoligical Society

PCOS is a clinico-pathological syndrome characterized by anovulation or infrequent ovulation, obesity, hirsuitism and numerous follicular cysts in enlarged ovaries. Finding of polycystic ovaries (PCO) does not mean that there is PCOS, as polycystic ovaries are found in 20 % of otherwise normal women. Polycystic Ovarian Syndrome (PCOS) is a common and heterogeneous disorder of women of reproductive age, characterized by chronic anovulation and hyperandrogenism. In addition to the infertility issues associated with anovulation. these women are at risk for developing endometrial cancers and Type II Diabetes in late life.

#### Diagnostic criteria in PCOS

Diagnosis of PCO is by ultrasound however, evidence of clinical manifestations of menstrual and associated altered biochemical profile, and suggests presence of PCOS. PCOS shows a strong familial tendency, suggestive of a major genetic component in its etiology. The diagnostic tests can be divided into

(A) Clinical (B) Bio-chemical (C) Ultrasound and

#### (A) CLINICAL TESTS

This essentially includes a detailed history and physical examination. Points to be taken

#### (1) Family History

The mode inheritance is autosomal dominant with give P 450 CYP-11a, and the gene for follistatin being implicated. More complete unbiased survey of families are needed for conclusive evidences. The other genes being studied are insulin gene (VNTRL locus), Insulin Receipt gene and Glycogen synthetase gene.

#### (2) Menstrual History

Amenorehoea and oligomenorhoa are common complaints in patients with PCOS. However, 20% of patients with PCOS have history of regular cycles in 10 years post-menarche, which later become irregular. Also, 28 % of all women with PCOS report irregular menses all throughout their reproductive years. Hartz et al found incidence of menstrual abnormality to the 3.1 times more in obese women than in women is normal weight range. Balen showed only 22 % had normal menstruation if BMI was > 30 kg/m2.

#### (3) Obesity

Infertile, anovulatory, over weight or obese women have higher plasma androgen, higher incidence of insulin resistance. hypersecretion of LH and lower SHBG levels than normal weight women. Obesity is defined in forms of an increased Body Mass Index (BMI) or an increase Waist to Hip Ratio (WHR). If the WHR is more than 0.82 than the patients are considered as obese. Adipose tissue plays an important role in steroid production and metabolism. Hence, it influences the hyperestrogenic state in PCOS and its associated menstrual & reproductive function.

#### (4) Evidence of Androgen Excess

PCOS is associated with hyperandrogenism and this androgen excess is seen in the form of Hirsuitism, androgenic alonecia. seborrhea and acne. About 30% of patients of PCOS will have acne: however 90-100% of women with severe and resistant acne will have PCOS.

#### (5) Acanthosis Nigricans

Acanthosis nigricans is a mucocutaneous eruption characterized by hyperkeratosis, papillomatosis and increased pigmentation. It is seen in 5% of women with PCOS. The lesions have a velvety contour and are commonly seen in the axilla, nape of the neck, under the breasts or in the flexures. It is the sign of insulin resistance and was the link which started researches to investigate the association between insulin resistance and PCOS

The term "HAIR-AN" syndrome is used to describe HyperAndrogenism, Insulin Resistance, and Acanthosis

#### (B) BIO-CHEMICAL TESTS

#### **Hypersecretion of Insulin**

The potential role of insulin in PCOS was suspected due to association of acanthosis nigricans in young women with menstrual disturbances. However, the presence of elevated insulin levels in non-obese PCOS patients was responsible for extensive investigation of the role of insulin in PCOS. Women with PCOS possess a specific post receptor binding defect in insulin action, whereby insulin induced tyrosine phosphorylation is replaced by phosphorylation of serine.

Many studies have shown that anovulatory women have resistance to extra-splanchanic action of insulin on carbohydrate metabolism and this effect is compounded in overweight patients, because obesity by itself increase insulin resistance and hence increases the secretion of insulin. This hypersecretion of insulin adversely affects reproduction by increasing the androgen secretion and enhancing the metabolic clearance rate of testosterone. This disrupts the normal ovulatory cycle, causing anovulation and leading to infertility.

#### Hypersecretion of LH

About 40% of patients with PCOS have elevated LH levels. There is an increase in both rate and amplitude of LH pulses. It has been suggested that increased insulin levels may be associated

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with an increase in pituitary response to GnRH stimulation and hence be responsible for increase in LH levels. Jacobs and Conway have suggested that leptin system may be involved in the hypersecretion of LH in PCOS. Leptin is a protein in adipocytes

which acts on brain as a satiety signal. A high leptin level cause an increase in LH levels, and also provides an important link between nutrition and PCOS. This increased LH levels in follicular phase, impair fertility by either causing anovulation or even in ovulating patients is associated with decreased the rate of conception and increased rate of miscarriage (65% v/s 12% amongst women with normal LH).

About 15% of patients with PCOS, have an increased prolactin levels. This may be due to the syndrome per se or may be an incidental finding.

#### (C) IMAGING FINDINGS IN PCOS

It is important to differentiate between polycystic ovaries and PCOS. With advent of high resolution USG, identification of PCOS

is simplified and ovarian biopsy is now unnecessary. Ovaries are described as PCO if there are 10 or more 2-8 mm cysts, aggregated around a dense stroma or scattered throughout an increased stroma. Some workers have also used Magnetic Resonance Imaging (MRI) to identify the polycystic ovaries and demonstrate the increased volume accurately. But with the 3-D ultrasound now available this is not



They should be differentiated from the multicysic ovaries which are commonly seen around puberty, post partum period and weight loss related amenorrhoea

Recent studies especially with 3-D USG have shown that a major component in the increased volume is the increased stroma with little contribution from the cysts.

#### **Pathophysiology**

Although the fundamental pathphysiologic defect is not known, women with PCOS can be divided into two groups. One group is with evidence of hypersecretion of LH and the other group of patients who are uniquely insulin resistant.

Genetic analysis shows INS VNTR class III alleles to be associated with PCOS and its associated hyperinsulinemia. Hyperinsulinemia has proved to be a key link in the enigmatic generation of the symptoms of PCOS. The molecular mechanisms of insulin resistance leading to hyperinsulinemia are now being elucidated. Women with polycystic ovaries are profoundly insulin resistant, and the resultant hyperinsulinemia exacerbates the reproductive abnormalities. Regression of these symptoms may be achieved by reducing the hyperinsulinemia.

The insulin resistance leads to hypersecretion of LH as the cause of the symptomatology.

Obesity is associated with central fat accumulation and an increased waist to hip ratio (WHR). PCOS is a multi-organ

> disorder and can give rise to long-term potential health risks. Obesity in PCOS aggravates the underlying insulin resistance.

There is an urgent need to define the more subtle features in young lean women with PCOS, in whom the metabolic syndrome is yet to emerge, which would enable the prediction of future health risks

Endometrial cancer remains one of the more serious potential complications for women with polycystic ovarian syndrome. Obesity, hypertension (probably atherosclerosis), and

alterations in carbohydrate metabolism are all key features of the risk pattern for women with evidence of polycystic ovarian

#### **Management with Insulin Sensitizing Drugs**

The discovery that insulin resistance has a key role in the pathophysiology of PCOS has led to a novel and promising form of therapy in the form of the insulin-sensitizing drugs.

Strategies to lower serum insulin concentrations include, possibly, oral insulin sensitizing agents such as metformin. Subgroups of women with this syndrome have 'metabolic PCOS' which can be considered to be a pre-diabetic state. The gold standard for improving insulin sensitivity in obese PCOS should be weight loss, by diet and exercise. Weight loss (of as little as 5%) alone can improve the fundamental aspects of the endocrine system of PCOS and result in low circulating androgen levels and spontaneous resumption of menses.

Drugs that ameliorate insulin resistance and reduce circulating insulin levels could provide a new therapeutic modality for PCOS.

#### Questions for self-assessment

1. What are diagnostic criteria for PCOS?

2. Should there be long term follow-up of these patients? If yes,

3. Why and how does the treatment vary now from the earlier protocols?

4. What are the evidences that point to insulin resistance as the probable cause of PCOS3

5. How do insulin lowering agents help in management of

6. What is the recommended plan for management of any patient

7. What does "HAIR-AN" syndrome stand for and how does it

8. What is leptin? How does it affect infertility management?

9. What are the USG criteria for diagnosing PCOS?

10. What is normal BMI and WHR?

## POEM - Dr. Sushma Deshmukh, Nagpur

#### SAFE MOTHERHOOD

We talk about safe Motherhood But mother is still in hood Since childhood

She has suffered

Without uttering a world! Her future only depends

On her husband

Or on her dear child

She always spends

Her life for her hubby & kid

Struggles for livelihood

Actually she should be worshiped But she is neglected

And remains always uncared

No one is aware That the Almighty God

With his divine hands

Has created

The most respectful need Of the world

Next to God

The Mother!

Newsletter of Indian College of Obstetricians & Gynaecologists