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IMPA NEWS

THE OFFICIAL NEWS LETTER OF THE INDEPENDENT MEDICAL PRACTITIONERS ASSOCIATION

IMPA News

- A very successful programme on "Mindfulness Session for the Medical Professionals" by Ms. Chrishara Paranwithana, Clinical Psychologist was held on Sunday 8th April 2018 at 7.30 pm at the Asiri Surgical Hospital sponsored by Asiri Health.

- The IMPA and College of GPs conducted a training programme for medical practitioners on HIV Screening on Saturday 21st April 2018 at Galle Face Hotel organized by the National STD and Aids Control Programme (NSACP), in order to detect and prevent the spread of HIV in Sri Lanka by 2025.

- The updated version of the IMPA Directory of Members 2018 is to be released at the end of June 2018.

- The IMPA Journal 2018 is to be released at the AGM in December 2018. The council elected the following members to the editorial board :-

Editor - Prof. I. Joel Fernando

Members - Dr. Palitha Abeykoon, Dr. Iyanthi Abeywickreme, Dr. Sujatha Samarakoon, Dr. Prasanna Siriwardene, Dr. A.L.P. de S. Seneviratne, Dr. M.K. Muruganathan, Dr. Sarath Samarage, Dr. N.P.S. Gunaratne, Dr. A.H.A. Hazari

IMPA members are requested to submit articles for the IMPA Journal 2018

- The Private Health Sector Regulatory Council (PHSRC) has appointed an Audit Firm to study the charges in the Private Health Sector such that medical fees could be regulated in the future.

OBITUARY

It is with deep regret that the IMPA announces the demise of

Senior IMPA member Dr.A.M. Karunaratne

Senior IMPA member Dr. Ariyasena Gamage

OPA Past President Eng. Taldena

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POLYCYSTIC OVARIAN SYNDROME

Dr. Shalani Malintha MB.BS;DFM
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Background

Polycystic Ovarian Syndrome (PCOS) is the commonest endocrinopathy affecting women of reproductive age. It is also one of the leading causes of subfertility. Women with PCOS may present with overweight, menstrual irregularities, hyperandrogenic features or subfertility.

Epidemiology

PCOS is the commonest endocrine disorder among women between the ages of 18 to 44. It affects approximately 2% to 20% of women of this age group.

Etiology

The etiology of PCOS is multifactorial. The most recent insight shows it as a multisystem disorder, with the primary problem lying in the hormonal regulation in the hypothalamus, with multi organ involvement. It may be due to the combination of genetic and environmental factors. Risk factors include obesity, lack of physical exercises and appositive family history. The genetic component appears to be inherited in an autosomal dominant fashion, with high degree of penetrance but variable expressivity in females. Familial clustering of cases, greater occurrence in the monocygotic twins, and heritability of metabolic and endocrine features of PCOS point towards the familial aggregation of the disorder. According to more advanced studies PCOS can be the result of exposure to environmental impacts during the prenatal period.

Pathophysiology

The hormonal imbalance of PCOS begins soon after menarche. Chronically elevated Luteinizing hormone(LH) and insulin resistance are the two most prominent endocrine abnormalities observed in PCOS. Women with PCOS have an increased frequency of hypothalamic GNRH in pulses, which in turn results in the elevation of LH. On the other hand Insulin resistance, one of the major abnormality causes higher levels of insulin in these subjects, contributing to or causing the abnormality in the hypothalamic- pituitary-ovarian axis leading to PCOS. Hyperinsulinemia increases GNRH pulse frequency, LH over Follicular Stimulating Hormone (FSH) dominance, ovarian androgen production, impaired follicular maturation and Sex Hormone Binding Globulin(SHBG) levels. Evidence support that high LH and hyperinsulinemia act synergistically, causing ovarian over growth, androgen production, ovarian cyst formation. The syndrome is named as that due to the common ultrasonic finding, multiple ovarian cysts (polycysts). These are actually immature follicles where their development has been arrested prematurely due to the ovarian dysfunction. These follicles mostly placed along the periphery of the ovary giving a ‘’string of pearls” appearance on ultrasound. Obesity, which is seen in 50% to 60% of PCOS patients, may increase the insulin resistance and hyperinsulinemia. Elevated insulin levels will lead to impaired synthesis of Insulin like growth factor binding proteins (IGFBP) and Sex Hormone Binding Globulins(SHBG) thus increasing the levels of androgens in blood. Acanthosis nigricans , a dark and hyperpigmented hyperplasia of the skin typically found at the nape of the neck and axilla, is a marker for insulin resistance.

Signs and Symptoms of PCOS

The major features of PCOS include menstrual dysfunction, anovulation and signs of hyperandrogenism. Such as,

- Excessive development of acne
- Hirsutism

other features include,

- Acanthosis nigricans
- Subfertility
- Hypertension
- Metabolic syndrome
- Diabetes
- Enlarged ovaries

Complications of PCOS

PCOS has several short term and long term complications that affect a persons’ quality of life.

Short term complications

Subfertility is by far the commonest short term complication. High androgen levels give rise to the virilizing features in a woman such as , hirsutism, male type hair loss and development of acne.

Long term complications

Androgen levels are often elevated in PCOS, increasing the risk of metabolic syndrome. Over the years excessive androgens will increase the risk of cardiovascular disorders, including hypertension and hyperlipidemia. Increased insulin resistance will in turn increase risk of developing type 2 diabetes in a relatively younger age. Also they are more prone to develop Obstructive Sleep Apnoea(OSA) as a result of overweight and

Cont. on page 04

obesity. Obsetetric complications,, such as Gestational Diabetes Mellitus(GDM), and preeclampsia can be seen in increasing rates in women with PCOS. Anxiety and depression are frequent findings in these patients. Unopposed high levels of estrogens will increase the risk of endometrial carcinoma in later life.

Management of PCOS

Management of PCOS consists of two major categories and is mainly symptomatic.

1. Non pharmacological management
   Lifestyle modifications are the first line intervention in obese PCOS patients. Healthy eating habits and regular physical exercise aiming weight reduction and maintaining appropriate body weight improves the condition. Treating acne and cosmetic measures such as thedding , electrolysis and laser treatment for hirsutism include the other supportive therapy.

2. Pharmacological management
   - Metformin- improves insulin sensitivity and glucose intolerance, ameliorates hyperinsulinemia and hyperandrogenism thereby enhancing ovulation. Metformin is an effective ovulation induction agent in non-obese women and shows some advantages over the traditionally used medications such as clomiphene. Metformin can also be used alone or in combination , in women with clomiphene resistant PCOS. Metformin reduces the risk of ovarian hyper stimulation syndrome in women with PCOS when undergoing invitro fertilization. It also has a beneficial effect on normalizing lipid levels.
   - Oral Contraceptive Pills (OCP) - low dose OCP improves hyperandrogenic features.
   - Clomiphene - is used to treat anovulatory subfertility in women with ovulatory dysfunction.
   - Spironolactone - is used for its antiandrogen effect.

Case report of a young woman presented with irregular menstruation

Ms. IR a 26-year-old bank officer, presented to the Family Medical Clinic with the complaint of irregular menstruation for the past 6 to 8 months. She also noticed an abnormal growth of hair on her face and Increased development of acne more than what she was used to get. Further she has put on weight over the past few months.

She was quite healthy in the past and was not on any long term medication.

She attended menarche at the age of 13 years. Since then she had been getting regular periods until about 8 months where her menstruation started getting irregular. The duration of cycles vary from 20 days to about 40 days. Her last period was 36 days back (30/10/12). She does not give a history of a similar illness in her mother or female siblings. There is no family history of subfertility.

Considering her social background, she holds a responsible post in a leading bank in the city of Colombo for the past one and a half years and finds her job to be quite stressful initially but with time she managed to cope with it. She lives with her parents and apparently there are no family, social or relationship conflicts bothering her at the moment. When inquiring on her eating habits ,she got used to consume a huge amount of fast food, sweets and sweetened beverages since she joined her current work place. Further she does not engage in any sort of a regular physical exercises.

On general examination, a well-dressed young woman with a Body Mass Index(BMI) of 26 Kg. There were features of hyperandregonism, such as hirsutism and acne with comidones. In addition to that there was evidence of merging acanthosis nigricans , a sign of insulin resistance. Examination of the breasts were normal.

Her blood pressure was 120/70 Hg mm. Abdominal examination revealed nothing abnormal while vaginal examination was not performed.

Discussion

Menstrual irregularities are common at the extremes of reproductive life, just after menarche and during the perimenopausal age and is physiological. Pregnancy is one of the commonest cause of irregular or missed period. When pregnancy is safely excluded following are recognized as causes of irregular menstruation.

- Excessive weight loss or gain
- Emotional stress
- Eating disorders such as, Anorexia Nervosa and Bulimia Nervosa
- Excessive physical exercise
- Recent travel
- Endocrinopathies such as hypothyroidism, hyperprolactinemia, hyperandrogenism
- Pelvic organ abnormalities such as Polycystic Ovarian Syndrome, uterine fibroids, Asherman' syndrome
- Chronic systemic diseases such as diabetes, inflammatory bowel disease, chronic liver disease, tuberculosis
- Pelvic Inflammatory Disease

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- Breast feeding
- Drugs such as hormonal contraceptives, hormone therapy, anticoagulants

Arriving at a working diagnosis

According to the clinical signs and symptoms PCOS is the working diagnosis considered in this patients. Weight gain due to the changes in lifestyle and unhealthy eating habits might have contributed to the current condition. Job stress can not be attributed as a cause at this point as she is now managing it quite well.

Investigations done at the Family Practice setting

An ultra Sound Scan was ordered to assess the volume and the appearance of the ovaries particularly the presence of multiple cysts. A fasting blood sugar testing was done to screen her for diabetes. Further hormone assessment such as serum LH and FSH estimations were suggested by the Family Physician and the patent agreed to get them done in the subsequent consultations. Management of this patient at the Family Medical Clinic

Management of this patient comprises of two major components

- Non pharmacological management
  Patient education regarding the condition, complications might occur in the future, possible contributory factors and how to eliminate the risk factors Lifestyle modification strategies – weight reduction aiming the ideal body weight Introduction of a healthy eating behaviours Engagement in regular physical exercises Which were agreed by the patient
- Pharmacological management
  Dyane 35 a low dose combined oral contraceptive pill was prescribed for 3 months.
  According to statistics PCOS is the commonest endocrinopathy affecting women in the reproductive ages. And it gives rise to several physical and psychological outcomes which badly affect a persons' quality of life. On the other hand, this condition can be successfully treated with simple lifestyle modification therapies. Therefore, it is of great importance to educate patients on how to minimize the risky behaviours while optimizing the healthy lifestyle. This is a common encounter in General Practice and Family Physicians should also be well aware of the above fact to treat their patients in a holistic approach. That makes discussing this case so important at this forum. Even though PCOS is a considered a disorder of reproductive age there were reported cases in per pubertal girls and postmenopausal women.

Hyperandrogenism is the main criteria in the diagnosis of PCOS. It can be defined by hirsutism and / or excess of plasma testosterone. Most have hirsutism and about 50% shows evidence of increases levels of testosterone.

The following androgens could be estimated in PCOS

- Total plasma testosterone
- Plasma free testosterone
- Sex Hormone Binding Globulin Levels (SHBG)
- Free androgen index- Total testosterone/SHBG x 100
- Plasma Androstenedione level

A triad of total testosterone, androstenedione and free androgen index can accurately define but may be helpful in normal weight PCOS patients.hyper androgenemia in 90% PCOS patients.

Levels of FSH and LH with increase LH to FSH ratios are strictly required but may be helpful in normal weight (non-obese) PCOS patients.

A prospective cohort study in Finland of 5589 females followed upto the age of 46 years showed the following risk factors for future PCOS

1. Increased weight gains between the ages of 14-31 ywaers
2. Increase in free androgen index
3. Increase in serum insulin levels
4. Increase triglycerides
5. Early puberty
6. Evidence of hyperandrogenemia in early life
7. Increased abdominal obesity with increase waist circumference
8. Increase LDL cholesterol
9. Isolated hirsutism
10. Isolate oligo/amenorrhea

References

1. Legro RS, Arslanian SA, Ehrmann DA, Hoeger KM, Murad MH, Pasquali R, et al. Diagnosis and Treatment of Polycystic Ovary Syndrome: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab [Internet]. 2013 Dec [cited 2017 Dec 16];98(12):4565–92.:https://academic.oup.com/jcem/article-lookup/doi/10.1210/jc.2013-2350
2. Palomba S, Santagni S, Falbo A, La Sala GB. Complications and challenges associated with polycystic ovary syndrome: current perspectives. Int J Womens Health [Internet]. 2015 [cited 2017 Dec 16];7:745–63. Available from: http://www.ncbi.nlm.nih.gov/pubmed/26261426
3. Rasgon NL, Carter MS, Elman S, Bauer M, Love M, Korenman SG. Common treatment of polycystic ovarian syndrome and major depressive disorder: case report and review. Curr Drug Targets Immune Endocr Metabol Disord [Internet]. 2002 Apr [cited 2017 Dec 19];2(1):97–102. Available from: http://www.ncbi.nlm.nih.gov/pubmed/12477299

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4. Salha O, Martin-Hirsch P, Lane G, Sharma V. Endometrial carcinoma in a young patient with polycystic ovarian syndrome: first suspected at time of embryo transfer. Hum Reprod [Internet]. 1997 May 1 [cited 2017 Dec 19];12(5):959–62. Available from: https://academic.oup.com/humrep/article-lookup/doi/10.1093/humrep/12.5.95
6. Pauli S, Lobo RA. Polycystic ovary syndrome after menopause: a case report. J Reprod Med [Internet]. 2004 Jun [cited 2017 Dec 19];49(6):491–4. Available from: http://www.ncbi.nlm.nih.gov/pubmed/15283061
7. N. Jonson.Metformin use in women with polycystic ovarian syndrome.Annalas of traditional medicine 2014 2 6 56 Availabla form; http://www.ncbi.nlm.nih.gov/pubmed/25333031 (accessed.2018 Jan 05)

What is Mindfulness ?

Ms. Chrishara Paranwithana
Clinical Psychologist

Mindfulness is about being fully aware of whatever is happening in the present moment, without filters or the lens of judgement. It can be brought to any situation. Put simply, mindfulness consists of cultivating awareness of the mind and body and living in the here and now. While mindfulness as a practice is historically rooted in ancient Buddhist meditative disciplines, it's also a universal practice that anyone can benefit from. And indeed, being present and mindful is an important concept in many spiritual traditions, including Buddhism, Christianity, Hinduism, Islam, Judaism, and Taoism.

Today mindfulness has expanded beyond its spiritual roots and even beyond psychology and mental and emotional well- being. Physicians are prescribing training in mindfulness practice to help people deal with stress, pain, and illness. Mindfulness has entered mainstream in the west and is exerting an influence in a wide variety of contexts including medicine, neuroscience, psychology, education and business.

Some of the greatest benefits of mindfulness come from examining your mental processes in this way, observing them dispassionately, as a scientist would. Because this allows great insight into habitual ways of thinking, it has profound power to alleviate stress and suffering.

We get so caught up in the material world that we forget about love, compassion, and generosity. The antidote is mindfulness: a simple and direct practice of moment - to - moment observation of the mind - body process through calm and focused awareness without judgement. As you come to see life as a process of constant change, you can begin to acknowledge all aspects of experience - pleasure and pain, fear and joy - with less stress and more balance. Paying attention to, or being mindful of, your own mind is of paramount importance. If the intentions are wholesome, the results will be fruitful and skillful. Conversely, if the intentions are unwholesome, the results will be unfruitful and unskillful. In this way our minds, through our intentions and thoughts are the creators of our own happiness and unhappiness.

By helping you begin to recognize your habitual thinking patterns and other. Ingrained behaviors, mind-fulness can play a significant role in enhancing your psychological and physical well- being.

Mindfulness is a way of learning how to relate directly to your life. Because it's about your life, no one else can do it for you or tell you exactly how to do it. Fortunately, it isn't something you have to get or acquire. You already have it within you; it's simply a matter of being present. In fact, in the very moment you recognize you aren't present, you've become present. The moment you see that you've been trapped by your thoughts, you gain the freedom to step out of the trap.

Mindfulness is a way of life that can be practiced in two ways: formally and informally. Formal practice means taking time out each day to intentionally sit, stand, or lie down and focus on the breath, bodily sensations, sounds, other senses, or thoughts and emotions. Informal practice involves bringing mindful awareness to daily activities, such as eating, exercising, chores, relating to others and basically any action, whether at work, at home, or anywhere else you find yourself.

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