



An introductory guide to Polycystic Ovary Syndrome (PCOS).

CAUSES, DIAGNOSIS & SYMPTOMS

PolyCystic Ovary Syndrome (PCOS) affects 8 to 13% of women worldwide. The exact cause of PCOS is not yet known. The characteristics of your PCOS is thought to be determined by the complex interplay of genes and environmental factors. PCOS is one of the most common reasons for fertility problems but many women do go on to have their desired family, sometimes with assistance. The term poly-cystic describes ovaries that may be slightly larger than normal and have what is referred to as many small “cysts” (which are in fact immature follicles) just below the surface of the ovary usually visible on ultrasound. To be diagnosed with PCOS you would have 2 of the 3 following;

1. **Irregular periods ie. more or less frequent than monthly or no periods or not ovulating**
2. **Signs of hyperandrogenism such as acne or hirsutism** (excess facial or body hair) or blood tests showing androgen levels higher than normal range for women.
3. **Polycystic morphology on transvaginal scan** (showing 20 follicles or more on the scan of your ovaries). Ultrasound scan is not recommended within 8 years of starting your period. For adults only, Serum Anti-Mullerian Hormone (AMH) could be used to define PCOM. Serum AMH should only be used in accordance with the diagnostic algorithm and is NOT recommended for use as a single test for PCOS and should not be used in adolescents.

The diagnosis **process also involves ruling out other conditions** that may cause similar symptoms.

PCOS symptoms can vary from person to person and across the lifespan. Not everyone will experience the whole range of symptoms. Symptoms can include: Irregular or absent periods, excess hair growth on face, stomach, back, loss of hair on the top of the scalp, acne that may be severe, weight gain, difficulty getting pregnant, anxiety and/or depression and increased risk of type 2 diabetes. Although there is no cure for PCOS at present, there are various treatments that can help manage and reduce both the symptoms and long-term consequences of having the condition. Some patients may also successfully manage symptoms without any medical intervention.

MENSTRUATION & FERTILITY

An “irregular period” cycle does not have a regularly monthly pattern. Irregular periods or an absence of periods (oligo- or amenorrhea) is usually a sign that you are not ovulating (not producing an egg/anovulation). Anovulation is the main reason for infertility in PCOS. The immature follicles stop growing and become trapped in the ovary giving it the polycystic appearance. Irregular or infrequent periods can cause build-up of the womb lining (endometrial hyperplasia) which is linked to endometrial cancer (womb cancer). **It is important to speak to your doctor so they can prescribe medication to bring on a period if your periods are less than 4 times a year or if there is longer than 3 months between periods.** With regards to fertility, it is thought that the follicles failure to develop is due to androgen excess (increased male hormone levels), high insulin levels and sometimes excess weight. If you are ovulating less often or not ovulating there are fewer opportunities to conceive and makes predicting your fertile times difficult. There are treatments that may help. Sometimes, medical treatment is needed but research suggests that in many cases if you have a high BMI, 5-10% weight loss may be enough to restore regular ovulation.

HAIR & SKIN

Excess androgens in PCOS can result in increased skin oil production which leads to Acne. Androgen excess also increases the growth of dark, coarse body hair in parts of the body such as face, neck, and stomach. This is called “hirsutism” in medical terms. Hair loss is also a result of androgen excess and can manifest as a general thinning of hair especially at the top of the scalp and this is called frontal balding.

MANAGEMENT & TREATMENT

The most effective treatment for women with PCOS is healthy lifestyle. A healthy lifestyle includes being active, eating a balanced nutritious diet, stop smoking and reducing alcohol consumption. Generally, weight loss of 5-10% can enhance natural fertility. However, some may need further medical treatment to manage symptoms.

Medications & Treatments

If periods are less than 4 per year or if there is 3 months or more between periods, medications can help. These include the contraceptive pill and progesterone medications. Other medications including intra-uterine device/Mirena coil, depot injection or implant and metformin can help to regulate and lighten periods. Metformin can induce ovulation and reduces hair in some people. With regards to fertility some women may need ovulation induction with gonadotrophin injections, letrozole or clomiphene or other medical treatments such as in vitro fertilization (IVF), ovarian drilling and intra-uterine insemination (IUI) (some services may not be available on the NHS). Caution is needed with IVF approach as there is a higher risk of overresponding to the drugs used to stimulate the ovaries in PCOS. This is called ovarian hyperstimulation in medical terms. Excess hair can be treated in various ways. These include Cyproterone Acetate, Spironolactone and Finasteride which you can discuss with your healthcare provider. ***WARNING: you should not get pregnant on any of these medications as it can affect the physical development of an unborn baby boy. Also note risk of psychiatric & sexual side effects which may persist after discontinuation of treatment with Finasteride (MHRA April, 2024).*** Hair loss can be treated with topical minoxidil however this is not available on the NHS and cannot be used when trying to conceive. For acne, retinoids (may cause damage to developing foetus, depression, suicidal feelings) and/or antibiotics, topical therapy containing benzoyl peroxide may help. Hair removal options include Vaniqa (eflornithine) cream that can help slow the growth of facial hair. Please note: Vaniqa can only be used on the face and can cause skin irritation and acne for some. Other hair removal methods include shaving, waxing, plucking, threading, laser, epilation, hair removal creams, bleaching creams & intense pulsed light (IPL) therapy (some of these therapies may not be available in the NHS services). Some supplements such as Inositol have benefitted some women with PCOS. However, scientific evidence is scarce. So, we recommend checking with your doctor to prevent interactions with medications you are taking and buying from a reputable source.

Weight management and exercise

No specific diet is recommended for PCOS. The best advice is to eat a balanced, healthy diet which includes fresh fruit, vegetables, and lean meats. Reducing sugary drinks and high salt and sugary foods and saturated fats can help.

Emotional Wellbeing

Having PCOS puts you at increased risk of anxiety and depression due to a combination of hormonal fluctuations and coping with distressing symptoms of PCOS. Not everyone experiences these. Anxiety, persistent feelings of worry or fear, and depression, a medical illness that negatively affects how you feel, are both treatable. If you experience feelings of sadness, loss of interest in everyday activities or persistent fears it is important to seek professional help early.

LONG TERM RISKS

PCOS may increase your risk of developing Type 2 Diabetes, Womb Cancer and Cardiovascular Disease but more research is needed. Lowering androgen excess may reduce these risks. **DISCLAIMER:** PCOS Vitality does not provide medical advice and does not advocate a particular course of action. This leaflet is not intended to replace professional consultation, diagnosis, or treatment by a medical professional. If you require medical advice, contact your doctor immediately. Information presented here is exclusively of a general reference nature. Do not disregard medical advice or delay treatment because of this information.

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