



**Subject:** Comprehensive Guide to Female Fertility: Issues and Solutions  
(Details of upcoming webinars below ~ CPD Applied)

**Dear GP's**

I hope this email finds you well. In this instalment of our fertility series, we delve into the complexities of female fertility, exploring common issues and their solutions to help you provide the best care for your patients.

**Common Causes of Female Infertility:**

**1. Ovulatory Disorders:**

- **Polycystic Ovary Syndrome (PCOS):** Affects 5-10% of women of reproductive age. Characterised by hyperandrogenism, chronic anovulation, and polycystic ovaries. Management includes lifestyle modifications, insulin-sensitising agents, and ovulation induction with clomiphene citrate or letrozole.
- **Hypothalamic Amenorrhea:** Often due to stress, excessive exercise, or low body weight. Treatment focuses on lifestyle changes and, if necessary, gonadotropin therapy.

**2. Tubal Factor Infertility:**

- **Tubal Blockages:** Can result from pelvic inflammatory disease (PID), endometriosis, or previous surgeries. Diagnostic tools include hysterosalpingography (HSG) and laparoscopy. Treatment options range from surgical repair to assisted reproductive technologies (ART) like IVF.

**3. Uterine and Cervical Factors:**

- **Uterine Anomalies:** Congenital anomalies (e.g., septate uterus) and acquired conditions (e.g., fibroids, polyps) can impact fertility. Hysteroscopic surgery is often effective for correcting these issues.
- **Cervical Insufficiency:** Can be addressed with cervical cerclage or ART techniques to bypass cervical barriers.

**4. Endometriosis:**

- Affects up to 10% of women of reproductive age. Endometrial tissue outside the uterus causes inflammation and scarring. Management includes medical therapy (e.g., GnRH agonists) and surgical intervention to remove endometriotic lesions.

#### 5. Diminished Ovarian Reserve (DOR):

- Characterised by a reduced quantity and quality of oocytes. Assessment includes AMH levels and antral follicle count (AFC). Treatment options include ovarian stimulation protocols and consideration of donor eggs in severe cases.

#### 6. Diagnostic Approaches:

- **Hormonal Profiling:** Assess levels of FSH, LH, oestradiol, and progesterone to evaluate ovarian function and identify endocrine disorders.
- **Imaging Studies:** Transvaginal ultrasound for antral follicle counts and structural assessment; HSG for tubal patency.
- **Laparoscopy:** Gold standard for diagnosing and treating endometriosis and pelvic adhesions.

#### Treatment Options:

##### 1. Medications:

- **Ovulation Induction:** Clomiphene citrate, letrozole, and gonadotropins are commonly used to stimulate ovulation in anovulatory women.
- **Hormonal Therapies:** For conditions like PCOS and hypothalamic amenorrhea, hormonal treatments can restore regular ovulation.

##### 2. Surgical Interventions:

- **Laparoscopic Surgery:** Effective for treating endometriosis, removing fibroids, and correcting tubal blockages.
- **Hysteroscopic Surgery:** Used to remove intrauterine polyps, fibroids, and septa.

##### 3. Assisted Reproductive Technologies (ART):

- **In Vitro Fertilisation (IVF):** Involves ovarian stimulation, egg retrieval, fertilisation in the lab, and embryo transfer. Indicated for various infertility causes, including tubal factor and male factor infertility.
- **Intracytoplasmic Sperm Injection (ICSI):** Used in conjunction with IVF for severe male factor infertility, where a single sperm is injected directly into the egg.

### Emerging Treatments and Research:

- **In Vitro Maturation (IVM):** A promising technique where immature oocytes are matured in the lab, reducing the need for ovarian stimulation.
- **Genetic Screening:** Preimplantation genetic testing (PGT) can identify chromosomal abnormalities in embryos, improving IVF success rates.

We are committed to providing you with valuable and practical information to enhance your practice. If you have any specific topics that you would like us to cover or any questions, please do not hesitate to reach out.

[www.sims.ie/gp-portal](http://www.sims.ie/gp-portal)

### **Upcoming Webinars 18<sup>th</sup> Sept: CPD Available**

#### **7.30am: Fertility & Reproductive Health – PCOS and Endometriosis Insights**

Presented by: Dr Dorota Wickiewicz, Clinical Director, SIMS Cork

#### **7.00pm: Fertility Preservation - Egg Freezing**

Presented by: Claire Collins, Fertility Nurse Specialist, Sims Carlow Clinic

CPD applied

Register today: [www.medcafe.ie](http://www.medcafe.ie) (upcoming meetings) / also available on demand

Best regards,

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