**University of the Philippines - Manila**

**Philippine General Hospital**

**OBGYN 251: Integrated Clerkship II in Obstetrics and Gynecology**

Case Protocol: Infertility

**Learning Objectives:**

1. To present the history and physical examination findings of a patient with Infertility
2. To formulate a working impression on the given history and physical examination
3. To read and interpret laboratory and diagnostic findings
4. To discuss the importance of the laboratory tests
5. To define Infertility
6. To provide an appropriate plan of management for the patient

**General Data:**

M.J., a 39/Gravida 0, Roman Catholic, Married, Housewife from Taguig City

**Chief Complaint:**

Difficulty to conceive for 1 year

**Past Medical History:**

(+) PCOS –history of 1 year menstrual irregularity and polycystic ovaries on ultrasound (Oligomenorrhea - interval of 35-60 days), treated for 1 year with unrecalled OCP (2012), with regularization of menses after 1 year of treatment

(+) Type 2 Diabetes Mellitus – seen by a general physician, diagnosed March 2019 with FBS of 140mg/dL. She was advised with dietary modification and treated with Metformin unrecalled dosage. Patient only took the medication for 3 months and discontinued thereafter with no regular monitoring of blood sugar.

No allergies.

No previous surgeries.

No previous hospitalization.

**Family Medical History:**

(+) Diabetes Mellitus, Hypertension- mother

(-) Bronchial asthma/allergies/thyroid/blood/kidney disorders, cancer

**Personal and Social History:**

College graduate, previously worked as an insurance agent, currently unemployed

Diet primarily consists of red meat, vegetables, and rice

Social drinker

3 pack year smoker, currently smoking 5 sticks per day for 12 years

Denies illicit drug use

**Menstrual History:**

She had her menarche at 11 years old. Her menses are in regular intervals of 28-30 days, lasting around 3-7 days, consuming 3-4 moderate to fully soaked pads per day. She experiences occasional dysmenorrhea during 1st day until the 2nd day of her menses.

She was sure of her last menstrual period which she claimed was last **October 3, 2020**

**Sexual History:**

First coitus at 25 years old with current partner (husband) but cohabitated only since October 2019. Previously living apart (partner is an OFW) and having unprotected sexual encounter 1-3x/year.

1 sexual partner (41 years old), works as an electrical engineer, allegedly nonpromiscuous

Current sexual activity: 5x/week without use of contraceptive methods for 1 year

No history of sexually transmitted disease

**Obstetric History:**

Obstetric Score: G0

**History of Present Illness**

Patient initially not trying to conceive with partner because of long-distance relationship.

1 year prior to consult, the patient is now living with husband and actively trying to conceive. Patient and partner with sexual encounters at least 5x per week for 1 year. Still, unable to conceive.

No prior consult done and no medications taken

**Review of Systems:**

**General**: (-) fever, (-) weakness, (-) weight loss, (-) pallor, (-) acne, (-) hirsutism

**HEENT**: (-) headache, (-) BOV, (-) tinnitus, (-) otalgia, (-) dysphagia, (-) dysphagia, (-) colds

**Pulmonary**: (-) dyspnea, (-) cough

**CVD**: (-) chest pain, (-) palpitations, (-) easy fatigability, (-) orthopnea, (-) edema

**GI**: (-) nausea, (-) vomiting, (-) constipation, (-) dyschezia, (-) diarrhea, (-) jaundice, (-) hematochezia, (-) melena

**GU**: (-) dysuria, (-) hematuria, (-) urinary incontinence, (-) dyspareunia, (-) vaginal discharge

**Neurological**: (-) numbness, (-) seizure, (-) paresthesia, (-) dizziness

**Endocrine:** (+) polydipsia (+) polyuria (-) polyphagia, (-) change in heat/cold intolerance

**Physical Examination:**

**Vital Signs:** Blood pressure: 130/90, Heart rate: 80 beats per minute, 98% O2 saturation, Respiratory rate: 18 breaths per minute, Temperature 36.7o C

**Height:**  160 cm **Weight:** 90kg **BMI:** 35.16 kg/m2

**General:** Awake, conversant, and not in cardiorespiratory distress

**HEENT:** Anicteric sclerae, pink palpebral conjunctivae, (+) acne on chin, jawline, forehead and cheeks (+) acanthosis nigricans, (-) cervical lymphadenopathy, (-) neck vein engorgement, (-) anterior neck mass, (-) hirsutism

**Heart and Lungs**: Adynamic precordium, (+) acne on chest and upper back, distinct heart sounds, normal rate and regular rhythm, equal chest expansion, clear breath sounds

**Abdominal:** Soft abdomen, normoactive bowel sounds, no palpable tenderness or mass, abdominal circumference 37 inches

**Extremities:** Full, equal, pulses, pink nail beds, CRT<2s, (-) cyanosis, (-) edema

***Pelvic/Internal Exam:***

**Speculum exam:** Normal external genitalia, pink smooth vagina, cervix is pink, smooth, no discharge

**Internal Exam:** Smooth, nulliparous vagina, cervix is 3x3cm smooth, small corpus, no adnexal masses or tenderness

**Rectovaginal Exam:** No perianal lesions, good sphincter tone, intact rectal vault, no palpable masses, bilateral parametria smooth and pliable, no nodularities palpable at the cul de sac, no intraluminal masses

Laboratories:

**75g OGTT (Feb 10, 2019)**

FBS 3.6 (64.8)

1st 13.2 (237.6)

2nd 12.3 (221.4)

**Sperm Analysis June 16, 2020**

Appearance: Opalescent (normal)

Volume: 2mL

pH: 7.5

Liquefaction: normal (24mins)

Viscosity: low viscosity

Total Motility: 44%

 a. Rapid/moderate: 14%

 b. slow progression: 30%

 c. non-progressive: 9%

 d. immotile: 47%

Concentration: 6 Million/mL

Total sperm count: 12M

Morphology: 2%

Leukocytes: 0-2/hpf

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| **Transvaginal Ultrasound:**  |
| 08/15/2020 LMP: July 31, 2020Day 16 of cycleThe uterus is anteverted with smooth, globular contour and heterogeneous echopattern measuring ­ 8.5 x 5.8 x 5.4 cm. The cervix measures 3.0 x 3.2 x 2.5 cm with homogeneous stroma and distinct endocervical canal. The endometrium is hyperechoic measuring 1.0cm. The subendometrial halo is intact.The right ovary measures 4.0 x 4.4 x 3.7cm. The left ovary measures 4.3 x 4.5x3.6cm. There is no free fluid in the cul de sac.**IMPRESSION:**Normal sized anteverted uterus Endometrium suggestive of secretory phaseNormal ovaries |

**Assessment:**

Primary infertility for 1 year secondary to female factor (1. Advance maternal age 2. Rule out ovulatory dysfunction) and male factor

To consider metabolic syndrome

1. Type 2 Diabetes Mellitus, unknown control

2. Prehypertensive

3. Obese Class II

**Guide Questions:**

1. What are the pertinent points in the history and physical examination of the patient that led to the primary working impression?
2. Are there other points in the history and physical examination that you want to elicit?
3. Are there any significant laboratory/diagnostic test results? What is/are their significance? What other laboratory/diagnostic tests would you order for the patient?
4. What is Infertility? Compare Primary vs Secondary Infertility. How is it diagnosed?
5. What are the signs and symptoms that you should look out for in a patient with Infertility?
6. What are the gynecologic and obstetrical implications of Infertility in patients?
7. What is the complete diagnosis? How will you manage this patient? How will you monitor her response?
8. How will you counsel patients with Infertility?