

Case 3: What should I do?



❖ Learning issues:

1. **Anatomy of the female external genitalia and other structures / organs (vagina, cervix, uterus, and perineum)**
2. **Microbiology, pathology and pathogenesis of Herpes simplex-2**
3. **Differences between HS1 and HS2**
4. **Interpretation of symptoms, signs and investigation of a patient with HS-2 infection**
5. **Briefly outline other STDs (N.gonorrhoea, HIV, Chlamydia, Syphilis)**
6. **The impact of HS-2 infection on the mother and her fetus**
7. **Transplacental transmission of STDs and the impact on the fetus**
8. **Counseling and investigation of a marriage partner for sexually transmitted diseases**





❖ Key information and Presenting problems:

- Sawsan, female, 26 years old, primigravida (32 weeks gestation)
- She has fever and feeling unwell
- She has pain on passing urine
- She feels uncomfortable in her genital area

❖ New problems and history:

- Stinging pain in her genitalia
- Vaginal discharge
- Decreased appetite
- She has no pain in the loins
- No sore throat, cough or runny nose
- **Past Medical History:** Nil
- **Family History:** Nothing significant
- **Medication and Allergy:** Nil
- **Social History:**
 - Has been married for about 18 months
 - Her husband works as a businessman, and travels a lot
 - Her husband is a smoker but since he became aware of Sawsan's pregnancy he stopped smoking at home

New terms	
Primigravida	A woman who is pregnant for the first time.
Gestation	The period of pregnancy
Stinging pain	A sharp tingling or burning pain or sensation.
Loin	Are the sides between the lower ribs and pelvis, and the lower part of the back
Cephalic presentation	is a situation at childbirth where the fetus is in a longitudinal lie and the head enters the pelvis first

Clinical examination

- Sawsan looks a little distressed and unable to sit comfortably
- She has no skin rash

Vital signs

Pulse rate	normal	temperature	38 “fever”
Blood pressure	normal	Respiratory rate	24 “high”

Abdominal examination

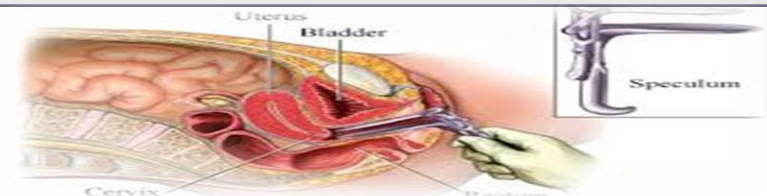
- Fundal height corresponds with 32 weeks gestation (matches with her dates)
- Cephalic presentation, longitudinal lie
- Fetal heart sounds are audible and normal

External genitalia and pelvic examination

- Vulva, and labia are edematous, tender to touch, and looks reddish in color
- **Vesicles** of 2-3 mm in diameter are present on the vulva and vaginal introitus (vaginal orifice) and contain clear fluid
- Speculum examination: a vaginal discharge is noted. Vagina is not inflamed and shows **no** vesicles. Cervix shows **2-3 vesicles**
- 2 to 3 inguinal lymph nodes are palpable and tender

CVS and respiratory examinations

Normal



Investigations:

1- **CBC:** Normal.

2- **vesicular fluid (swab) :**

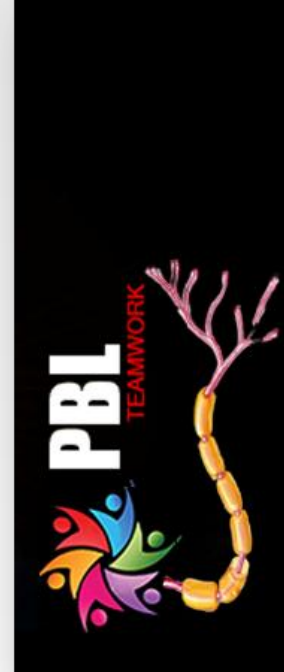
Test:	Sawsan	Normal range
Cell culture for HS-2	Cytopathic effect	no effect
Immuno-flourescent HS-2	positive	negative
PCR HS-2	positive	negative

3- **serology for (serum antibodies for HS-2)**

Test	Sawsan	Normal range
IgM to HS-2	Reactive	Non-reactive
IgG to HS-2	Reactive	Non-reactive

4- **Other STDs:** negative (normal)

Blood test	Sawsan	Normal range
Serology		
Human Immunodeficiency virus (HIV)	Non-reactive	Non-reactive
Hepatitis B virus (HBV)	Non-reactive	Non-reactive
Hepatitis C virus (HCV)	Non-reactive	Non-reactive
Trepomena pallidum	Non-reactive	Non-reactive
PCR		
Chlamydia	Non-reactive	Non-reactive
Neisseria gonorrhoeae	Non-reactive	Non-reactive
Culture		
Neisseria gonorrhoeae	No growth	No growth



▪ Investigations (continued):

5- **Urinalysis:** No pus , no RBCS , no bacteria

▪ Diagnosis:

Genital herpes caused by Herpes simplex virus type 2 ..

▪ Management:

1. As apart of management, Sawsan's husband has been asked for screening of STDs and he is negative for all **except for herpes simplex virus 2** ..

HS-2	Sawsan's husband	Normal results
IgM antibodies	Non-reactive	Non-reactive
IgG antibodies	Reactive	Non-reactive

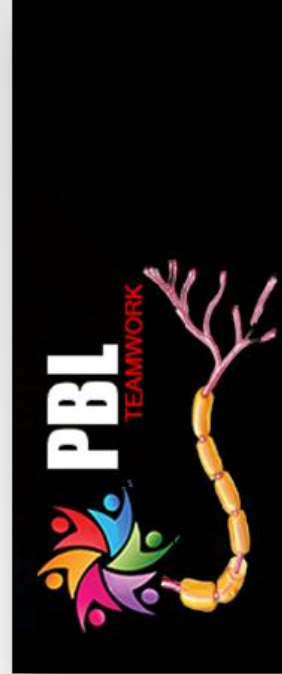
2. medical therapy : the doctor starts Sawsan on:

- ✓ **Acyclovir cream** → antiviral drug
- ✓ **Panadol tablets (Paracetamol)** → pain killers

3. The doctor advices them not to have sexual intercourse at the present time.

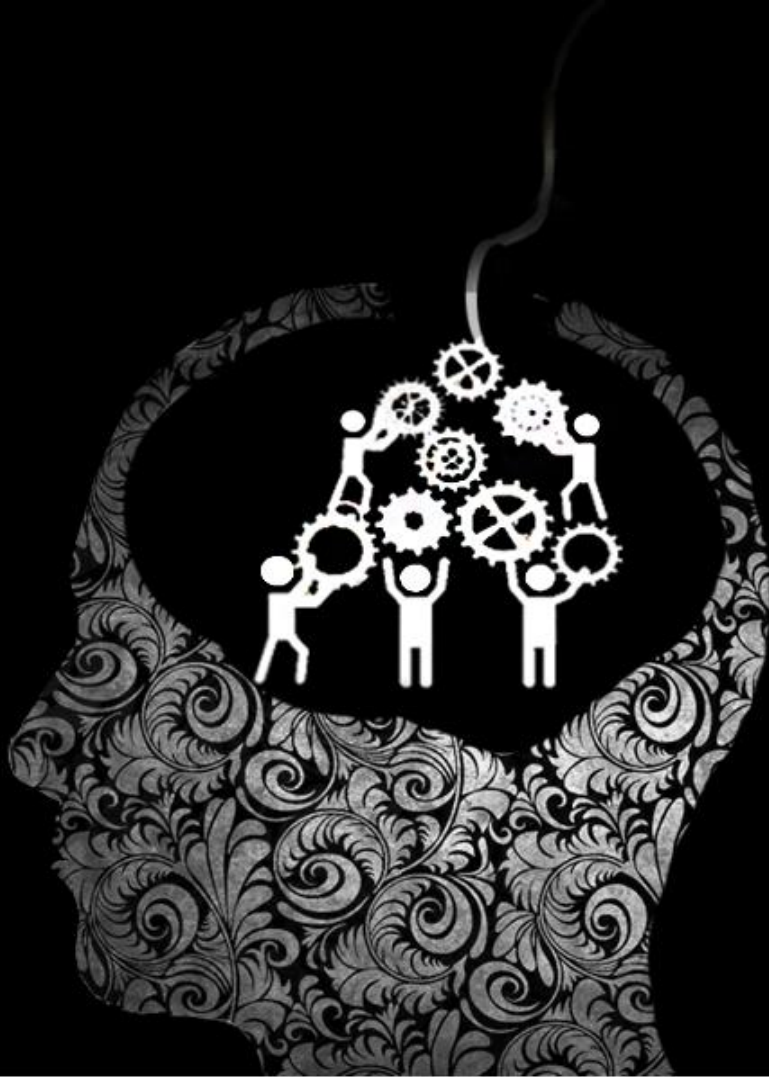
▪ Prognosis:

- 2 weeks later, Sawsan feels much better and the vesicles disappeared.
 - At 38 week examination, there is few vesicles on the cervix → So, the doctor decides to deliver the baby via **lower segment caesarian section** .
 - **The newborn baby:** boy, 3.2 kg, has APGAR* score 9 at 1 min. and 10 at 5 min. (normal APGAR) , looks fine and he has no evidence of infection.
- (* the score of assessment of a newborn)



Questions

Q1: What is the diagnosis?	Q2: What did the doctor prescribed For Sawsn's condition?
Genital herpes caused by HSV-2	Acyclovir → Antiviral Panadol → Analgesics
Q3: Why the doctor didn't give the husband a treatment?	Q4: what is the deference between IgM & IgG, and which one will be reactive to HS-2 in Sawsan case?
Because his infection is not active (he is suffering a latent viral infection which is not symptomatic)	Both, IgM and IgG antibodies to HS-2 will be reactive. IgG = active in chronic cases "gdeem" IgM = active in acute cases "M~N "New"
Q5: Why did the doctor ask to examine Sawsan's husband?	Q6: Mention two differential diagnosis that the doctor was looking for?
Because Sawsan has a sexually transmitted disease so we should examine her husband	<ul style="list-style-type: none"> • Gonorrhoea • Syphilis
Q7: How we could deliver the baby?	Q8: What's the main difference between HSV-1 & HSV-2 ?
via lower segment caesarian section	HSV-1 → Oral type HSV-2 → Genital type



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