



National Guideline for the Management of Sexually Transmitted Infections



دائرة الصحة العامة
المركز الوطني للايدز
2021



REPUBLIC OF IRAQ
Ministry of health
Public Health Directorate



National Guideline for the Management of Sexually Transmitted Infections

دائرة الصحة العامة
Public Health Directorate



المركز الوطني للإيدز

#	Names	Affiliations
1	<i>Dr. Hussein Ali Mahdi</i>	MD,CAB-CM/Manger of National AIDS Center
2	<i>Dr. Huda Ridha Abdalkareem</i>	MD,CAB-CM/National AIDS Center
3	<i>Dr. Rasha Khattab Ahmed</i>	MD,FICMS-FM/National AIDS Center
4	<i>Dr. Noor Shamil Abdulrahim</i>	MD,CAB-CM/National AIDS Center
5	<i>Ph. Mustafa Mohmmed Abdulhassen</i>	BSc (pharm)/National AIDS Center
6	<i>Dr. Fadil Hussien Al-Shibli</i>	MD, Consultant Infectious disease/ Al Russafah health directorate
7	<i>Dr. Shadha Mohmmed Al-Bayati</i>	MD, FICMS-Dermatology& venereology Consultant /Al-Yarmouk teaching hospital.
8	<i>Dr. Naser Sabah Hussein</i>	MD, FIBMS-Urology Consultant/Al-Karama teaching hospital.

Acknowledgement

We cannot express enough thanks to our manager of the Public Health Directorate in MOH for their continued support ***Dr. Riyadh Abdul Amir Al-Halfi***.

The National guideline could not have been accomplished without the support of ***Dr. Wi Teodora Elvira*** (WHO HQ) ,***Dr. Mugisa Bridget*** (WHO EMRO), ***Ms. Joumana Hermez*** (WHO EMRO) and ***Ms. Babovic Maria Theresa*** (WHO HQ) , thus Iraq became the first country in the region to adapt the latest WHO guidelines for the management of sexually transmitted diseases.

Finally special thanks to ***Dr. Jehan Al-Badri*** National Professional officer (WHO /IRAQ) and ***Dr. Hanan Hasan*** National professional officer (WHO/IRAQ) for continued communication with the working team.

Contents	Page No.
Introduction	1
Objectives of STI Case Management	2
Prevention of STIs	3
History-taking & risk assessment	5
Clinical examination of persons complaining of STI -related symptoms	7
Establishing a diagnosis	8
Health education & counseling	9
Follow-up & Referral for patients with STIs	11
Urethral Discharge Syndrome	13
Vaginal Discharge Syndrome	18
Lower Abdominal Pain (PID)	25
Genital Ulcer	30
Ano-Rectal Discharge	37
Scrotal Swelling	41
Neonatal Conjunctivitis	44
Inguinal Bubo	47
References	52

Table		Page No.
Tab. 1	The five P'S: Partners, Practices, Prevention of pregnancy, Protection from STIs, Past history of STIs	6
Tab. 2	The 4Cs : Compliance, Counseling, Condoms & Contact Management	10
Tab. 3	Common Pathogens causes for STI Syndromes	11
Tab. 4	Clinical characteristics of infectious causes of urethral discharge syndrome & laboratory diagnosis	13
Tab. 5	Recommended treatment options for urethral discharge syndrome	16
Tab. 6	Clinical characteristics of infectious causes of vaginal discharge syndrome & laboratory diagnosis	19
Tab. 7	Treatment options for vaginal infections	22
Tab. 8	Treatment options for cervical infection	23
Tab. 9	Treatment options for Pelvic Inflammatory Disease	28
Tab. 10	Clinical characteristics of infectious causes of genital ulcer & laboratory diagnosis	30
Tab. 11	Reactivity of serological tests by stage of syphilis and effect of treatment	31
Tab. 12	Treatment options for GU	35
Tab. 13	Clinical characteristics of infectious causes of anorectal discharge & laboratory diagnosis	37
Tab. 14	Treatment options for people presenting with anorectal discharge	40
Tab. 15	Clinical characteristics of infectious causes of scrotal swelling & laboratory diagnosis	41
Tab. 16	Treatment options for scrotal swelling (epididymitis)	43
Tab. 17	Clinical characteristics of infectious causes of neonatal conjunctivitis & laboratory diagnosis	44
Tab. 18	Treatment options for Treatment neonatal conjunctivitis	46
Tab. 19	Clinical characteristics of infectious causes of inguinal bubo & laboratory diagnosis	47
Tab. 20	Treatment options for Inguinal Bubo (LGV)	49

Figure		Page No.
Fig. 1	Comprehensive STI case management guidelines	2
Fig. 2	Flowchart for people complaining of urethral discharge	14
Fig. 3	Flowchart for health-care provider to manage people complaining of vaginal discharge according to local availability of resources & preferences	20
Fig. 4	Flow chart for the management of lower abdominal pain	26
Fig. 5	Flowchart for people who present with ano-genital ulcers (including ulcers, vesicles, or sores on genitals and anorectal sites)	32
Fig. 6	Flowchart of people complaining of ano rectal discharge	39
Fig. 7	Flowchart of Scrotal Swelling	42
Fig. 8	Flowchart of Neonatal Conjunctivitis	45
Fig. 9	Flowchart of Inguinal Bubo	48
Fig.10	STI case management asymptomatic STI	50

Abbreviation	
AIDS	Acquired Immune Deficiency Syndrome
AMR	Antimicrobial Resistance
BV	Bacterial vaginosis
CT	Chlamydia trachomatis
DAF	Direct immune fluorescence assay
DNA	Deoxyribonucleic Acid
FTA-ABS	Fluorescent Treponemal Antibody Absorption
GUD	Genital Ulcer Disease
HEC	Health education & counseling
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus
HSV	Herpes Simplex Virus
HSV-2	Herpes Simplex Virus type 2
IX	Investigation
LGV	Lymphgranuloma Venereum
Mgt	Management
MG	Mycoplasma genitalium
MSM	Men who have Sex with Men
NAAT	Nucleic Acid Amplification Test
NG	Neisseria gonorrhoeae
PCR	Polymerase Chain Reaction
PHC	Primary Health Care
PLHIV	People living with HIV
POCT	Point of care test
RIS	Rapid immune chromatic test
STI	Sexually Transmitted Infection
SDG	Sustainable Development Goal.
TPHA	Treponema Pallidum Haemagglutination Assay
TPPA	Treponema pallidum particle agglutination assay
TV	Trichomonas vaginalis
VDRL	Venereal Diseases Research Laboratory
4Cs	Compliance, Counseling, Condoms and Contact Management
5Ps	Partners, Practices, Prevention of pregnancy, Protection

Introduction

Sexually transmitted infections (STIs) are a major public health problem worldwide. STIs refer to various clinical syndromes and infections caused by pathogens that can be acquired and transmitted through sexual activity. (STIs) are common and preventable causes of morbidity and severe complications and have a profound impact on the physical, psychological and social wellbeing of children, adolescents, and adults worldwide, by causing infertility, anogenital cancers, and general ill-health pelvic inflammatory disease, and adverse outcomes of pregnancy such as (ectopic pregnancy, miscarriage, fetal loss, and congenital infections).

Besides, STIs have also been associated with fears of relationship disruption and gender-based violence, thus undermining effective partner notification. In the end, it is affecting the health-related quality of life of individuals as a whole.

In addition to the above-mentioned complications caused by STIs, (HSV-2, Syphilis and Chancroid) causing genital ulcers & increase vulnerability to transmission and acquisition of HIV infections. Non-ulcerative STIs (Gonorrhoeae, Chlamydia, and Trichomoniasis) have been shown to increase HIV transmission through genital shedding of HIV.

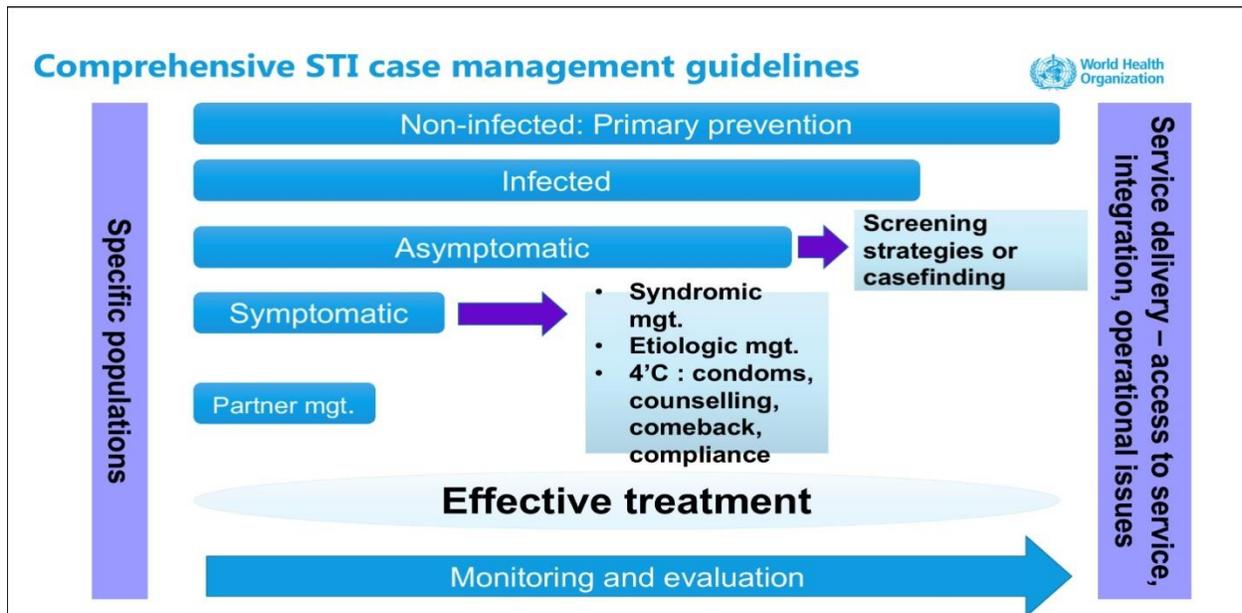
The prevention and control of STIs is an integral component of comprehensive sexual and reproductive health services needed to attain the related targets under Sustainable Development Goal (SDG).

Objectives of STI Case Management

The objectives of a comprehensive STI case management are to provide treatment, obtain cure, reduce infectiveness, reduce risk of developing complications of STIs and reduce or prevent future risk-taking behavior. This requires that the patient receives the following services:

1. Accurate risk assessment and education and counseling of persons at risk on ways to avoid STIs through changes in sexual behaviors and use of recommended prevention services;
2. Pre-exposure vaccination of persons at risk for vaccine preventable STIs;
3. Identification of asymptomatically infected persons and persons with symptoms associated with STI;
4. Effective diagnosis, treatment, counseling, and follow up of infected persons;
5. Evaluation, treatment, and counseling of sex partners of persons who are infected with an STI.

Figure 1: Comprehensive STI case management guidelines



Prevention of STIs

Prevention the determinants of STI epidemiology are as multifaceted as the approaches to prevention and care should be. The interventions for preventing the spread of STIs and HIV should take into consideration the role of human physiology, human behavioral patterns and sociocultural influences. STI and HIV prevention cannot be addressed by behavior and barrier methods alone. Other factors such as family units and values, provision of housing to minimize disruption of family life, employment, education, religion, culture, age, gender and so on need to be kept in mind at all times.

Primary prevention

Primary prevention activities are essentially the same for STIs as for sexually transmitted HIV because the primary mode of transmission for both is sexual intercourse. It is logical that there should be full integration between those responsible for AIDS/HIV prevention and those responsible for STI prevention activities. In primary prevention the **aim is to prevent the acquisition of infection and disease**. This can be done by promoting:

- Safer sexual behavior.
- Human papilloma virus vaccine.
- The use of condoms.

Only primary prevention activities can have an effect on those presently incurable STIs resulting from viral infections.

Sexually transmitted infections policies and principles for prevention and care. Most of the prevention messages will apply to both HIV and conventional STIs but the educational messages which specifically relate to STIs will include:

- Information that many STIs can be treated and cured.
- Information that early treatment is necessary to avoid complications and permanent sequel.
- Information that symptoms and signs may not be noticed, particularly in women, until complications appear.
- Description of recognizable signs and symptoms;

- A list of places where STI advice may be obtained (i.e. basic health care services) and, where available.
- Assurance that wherever services are obtained in the public sector privacy, confidentiality and respect are guaranteed.
- Advice on assessing one's personal risk of having acquired an STI, and also that of sexual partner(s). (If the assessment suggests a possibility of STI, attendance for STI advice is indicated).

Secondary prevention

Secondary prevention: entails the provision of treatment and care for infected affected persons.

The activities should include:

- Promotion of health care seeking behavior directed not only at those with symptoms of STIs, but also at those at increased risk of acquiring STIs, including HIV infection;
- The provision of clinical services that are accessible, acceptable and effective, and which offer diagnosis and effective treatment for both symptomatic and asymptomatic patients with STIs, and their partners
- Support and counseling services for both STI and HIV patients Knowledge and experience in promoting health care-seeking behavior for women, men and young people in relation to STIs is limited.

History-taking & risk assessment

History taking from STI patients is a critical task, and healthcare providers have to learn special skills according to social and cultural norms of a particular society. The history should be taken in privacy and in non-judgment and non-corrective manner. Confidentiality should be maintained at entry level. The physician should encourage the patient to explain his/her problem in his/her own words and he/she should not be interrupted. Following questions may help in getting the correct history:

- What are your complains?
- When did they start?
- When did you have sex last time?
- With whom did you have sex? Stranger, regular partner?
- With whom you have had sex in last three months?
- Did you use a condom?
- Are you married?

(Questions can be modified according to the situations)

Risk Assessment:

- Primary prevention of STIs includes performing an assessment of behavioral risk (i.e., assessing the sexual behaviors that may place persons at risk for infection) as well as biologic risk (i.e., testing for risk markers for HIV acquisition or transmission in order to evaluate the risk assessment for the patient with STIs.
- The “Five Ps” approach to obtaining a sexual history is one strategy for eliciting information concerning five key areas of interest (Tab.1). For additional information about gaining cultural competency when working with certain populations (e.g., gay, bisexual, or other men who have sex with men [MSM], women who have sex with women [WSW], or transgender men and women) .

Remember the 5 Ps

Table 1: The five Ps: Partners, Practices, Prevention of pregnancy, and Protection from STIs, Past history of STIs

<p>Partners:</p> <ul style="list-style-type: none">• “Do you have sex with men, women, or both?”• “In the past 2 months, how many partners have you had sex with?”• “In the past 12 months, how many partners have you had sex with?”• “Is it possible that any of your sex partners in the past 12 months had sex with someone else while they were still in a sexual relationship with you?”
<p>Practices:</p> <ul style="list-style-type: none">• “To understand your risks for STIs, I need to understand the kind of sex you have had recently.”• “Have you had vaginal sex, meaning ‘penis in vagina sex’?” If yes, “Do you use condoms: never, sometimes, or always?”• “Have you had anal sex, meaning ‘penis in rectum/ anus sex’?” If yes, “Do you use condoms: never, sometimes, or always?”• “Have you had oral sex, meaning ‘mouth on penis/ vagina’?”• For condom answers: If “never”:• “Why don’t you use condoms?”• If “sometimes”: “In what situations (or with whom) do you use condoms?”
<p>Prevention of pregnancy:</p> <ul style="list-style-type: none">• “What are you doing to prevent pregnancy?”
<p>Protection from STIs:</p> <ul style="list-style-type: none">• “What do you do to protect yourself from STIs& HIV?”
<p>Past history of STIs:</p> <ul style="list-style-type: none">• Have you ever had an STI?”• “Have any of your partners had an STI?” Additional questions to identify HIV and viral hepatitis risk include:• “Have you or any of your partner’s ever injected drugs?”• “Have your or any of your partners exchanged money or drugs for sex?”• “Is there anything else about your sexual practices that I need to know about?”

Clinical examination of persons complaining of STI -related symptoms

- **External examination**

Always use gloves while examining the patient.

Steps to follow when examining the male patient

Patient should be examined in complete privacy with adequate light in standing position. Preferably patient should be asked to undress completely, but if this is not possible, at least patient has to pull down trousers and underwear so that the genital area is clearly visible.

Look at the penis (if not circumcised ask patient to pull back foreskin.)

- Ask the patient to milk the penis upwards if no obvious discharge is present.
- Look at the groin, pubic and perineal areas
- Look at the skin of whole body, including palms and soles any rash.
- Palpate the groins, testicles and other lymph glands, for swelling/tenderness.
- Note if there is discharge from the urethra and take specimen for gram- staining and culture if facility exists.
- Note if there is any sore or ulcer, growth or warts, swelling or tenderness of testicles
- Take specimen from ulcer if facilities for testing exist.

Steps to follow when examining the female patient

Examine the patient lying on her back on table with knees flexed under proper light.

- Expose the private area, look at the external genitalia, and perineal region for sore, ulcer or growth. Palpate lower abdomen and groins for mass or tenderness.
- Separate outer labia, look at the inner labia, separate them, look at introitus and perform bimanual examination for cervical excitation.
- Note tenderness while moving the cervix. If vaginal speculum is available, then it should be inserted in the vagina, vaginal walls and vaginal vault should be examined for any discharge, ulcer or inflammation.

A speculum examination

Should be performed next to visualize the cervix and vaginal mucosa.

How to perform a speculum examination

A speculum examination is often performed alongside a bimanual examination as part of good practice gynecological workup, especially in women with anogenital complaints.

- Before performing a speculum examination, the patient should be informed about the device.

- In preparation for performing a speculum examination, the following steps should be taken:

The patient should have an empty bladder to make the examination more comfortable;

- The speculum should be properly sterilized before use;
- Light source should be prepared and tested before beginning the procedure.

An anoscopy examination

How to perform an anoscopy examination

An Anoscope is an instrument used for visualization of the anus and lowest portion of the rectum.

Anoscopy can be performed within a health-care facility provided sufficient training has been undertaken and equipment such as an examination couch, gloves, a light source and lubricants are available. No special preparations are needed, such as emptying the bowels or topical anesthetic. However, some health facilities apply a topical anesthetic 30 minutes before the procedure. Caution is needed in patients who have undergone recent anal surgery or known to have anal fissures.

Before performing the procedure, the patient should be informed about the device.

Establishing a diagnosis

Traditionally, laboratory tests have been used to address STI prevention and control to achieve the following.

- To provide a **definitive diagnosis**, thus, allowing for an etiology-guided treatment
- To provide **screening services for asymptomatic** individuals at risk of infection;
- To provide **statistical information on the prevalence** of various infections;
- To determine **antimicrobial susceptibility of causative organisms**; and
- To assist with **management of sex partners**

The diagnosis could then be made through a combination of:

- ✚ direct microscopy in syndromes with genital discharges,
- ✚ culture of the organisms, such as *N. gonorrhoeae*,
- ✚ serological testing as in syphilis and HIV infection
- ✚ molecular detection.

In the **absence of diagnostic tests**, a syndrome-based approach to the management of patients with STIs, The syndromic management approach is based on the identification of consistent groups of symptoms and easily recognized signs (syndromes), and the provision of treatment that will take care of the majority of, or the most serious, organisms responsible for producing the syndrome.

Health education and counseling

Education and counseling of patients with STIs are very important, not only for the current episode, but also to prevent future episodes. Education and counseling are an essential component of the first encounter with the STI client.

The clinical setting provides a very good opportunity for education and counseling of STI patients. Since STI patients are already at increased risk, they are more willing to receive educational messages from their health care provider.

Standardized information should be provided to all STI patients.

This information is summarized as the 4Cs:

- ✚ **Compliance,**
- ✚ **Counseling for prevention,**
- ✚ **Condom use and**
- ✚ **Contact management.**

Remember the 4CS

Table 2: The 4Cs : Compliance, Counseling, Condoms and Contact Management

<p>➤ Compliance: STI patients must be encouraged to comply to their prescribed treatment:</p> <ul style="list-style-type: none">▪ Give all necessary instructions for the patient to complete the full course of treatment. Disappearance of symptoms during treatment does not mean that the patient is cured▪ To avoid re-infection from partner or transmitting the infection to partner, the patient should avoid sexual contact during the treatment and until partner has been treated▪ Ensure a follow-up visit
<p>➤ Counseling for prevention: Every patient suffering from STI must receive and understand the following educative messages tailored for each patient :</p> <ul style="list-style-type: none">▪ Sexual contact is the cause of STIs▪ Without treatment, STIs may cause severe complications▪ The mode of transmission of STIs, including HIV▪ STI augments the risk of HIV transmission▪ Information about safer sex practices and use of condom▪ Offer referrals for applicable services, such as for 4Cs : Compliance, Counseling, Condoms and Contact Management
<p>➤ Condom use: To minimize the further transmission of STIs, including HIV, it is essential to educate all clients on the proper use of a condom:</p> <ul style="list-style-type: none">▪ Demonstrate to each patient how to use a condom correctly▪ Clinic should supply condoms to STI clients
<p>➤ Contact management(partner & child): Patients must understand the importance of partner management even if he/she is asymptomatic:</p> <ul style="list-style-type: none">▪ Risk of re-infection from asymptomatic partner▪ Risk of complications for his/her partner▪ Possible ways of partner management include:▪ Providing additional treatment regimens for the partner▪ Encouraging partners to come to the clinic for treatment

Follow-up and Referral for patients with STIs

Encourages that patients diagnosed with **STIs be provided immediate treatment** and, if any diagnostic tests are to be carried out, that they do not delay the provision of treatment to the patient. This would ensure an immediate break in the chain of transmission and prevent STI-related complications and long-term sequel of STIs.

When treatment is given during the same visit by the patient it ensures that infectiousness and onward transmissions are reduced.

This is even more so if **single dose therapies are available**.

Then follow-up of patients may be restricted only to those with **persistent symptoms** after a stipulated period. This will decrease costs for both the patient and the health service.

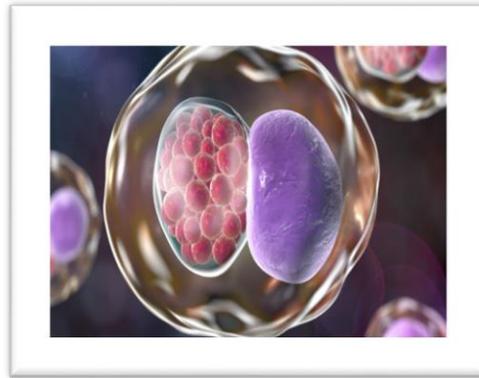
Table 3: Common Pathogens causes for STI Syndromes

STI SYNDROME	COMMON CAUSES
Urethral discharge	N. gonorrhoeae, C.trachomatis
Vaginal discharge	N. gonorrhoeae, C. trachomatis, T. vaginalis, B.vaginosis, C.albicans,
Pelvic inflammatory disease	N. gonorrhoeae, C.trachomatis, Anaerobic bacteria (facultative Gram negative cord like, M.genitalium
Genital ulcer	T. pallidum, HSV
Ano-rectal discharge	HPV, HSV and syphilis; N. gonorrhoeae, C. trachomatis
Scrotal swelling	N. gonorrhoeae, C. trachomatis,
Neonatal conjunctivitis	N. gonorrhoeae, C. trachomatis
Inguinal Bubo (Larbi arbi dibble)	LGV (Chlamydia trachomatis L1-L3)

Urethral Discharge Syndrome



N. gonorrhoeae



C. trachomatis

Urethral Discharge Syndrome

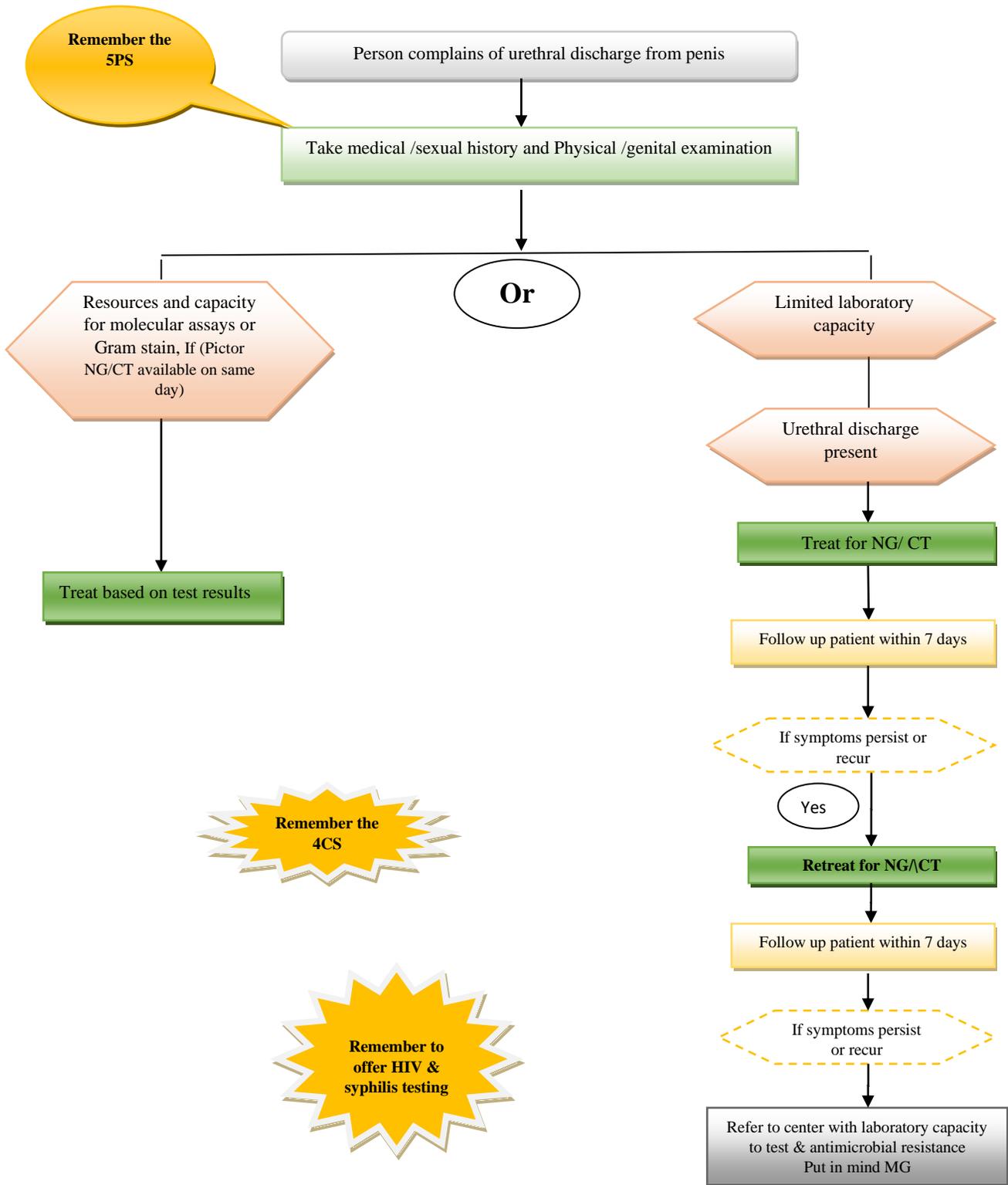
Case definition: A discharge in men (with or without dysuria), seen at the urethral meatus, with or without milking/expressing the urethra

- Common Pathogens causes for Urethral discharge in men is due to :
 - **N. gonorrhoeae**
 - **C. trachomatis**
 - **Less common Non-gonococcal /Non-Chlamydia** pathogens, such as **M. genitalium** and **T.vaginalis** as a cause of persistent or recurrent urethral discharge syndrome.

Table4: Clinical characteristics of infectious causes of urethral discharge syndrome & laboratory diagnosis

Parameter	N. gonorrhoeae	C. trachomatis
Signs& Symptoms	Men with urethritis (inflammation of the urethra) present with urethral discharge with or the only symptoms A urethral discharge is noticed which may range in quantity from being scanty to copious, and in character from being clear to purulent. It is not clinically possible to distinguish between a discharge due to gonorrhoeae, Chlamydia or any other etiology of urethritis	
Laboratory diagnosis		
Microscopy	light microscopy of Gram-stained samples	Direct immune fluorescence assay (DAF), laboratory-based and point-of-care enzyme
Molecular detection	The nucleic acid amplification tests (NAATs) are the current gold standard for detection of C. trachomatis and N. gonorrhoeae in men and women	
Culture methods (recurrent or persistent infections)	Still the standard method for performing antimicrobial susceptibility testing.	Isolation of C. Trachomatis by culture.

Figure 2.Flowchart for people complaining of urethral discharge



Recommendations for the management of people complaining of urethral discharge:

For the management of urethral discharge for people who complain of urethral discharge from the penis, we recommend management based on results of quality assured molecular assays or other laboratory test. However, in settings where there are limited or no molecular tests or laboratory capacity, we recommend syndromic treatment to ensure treatment on the same day of visit

Good practice include:

- For people with recurrent or persistent urethral discharge, good practice includes referring people to a urology center with laboratory capacity to diagnose *N. gonorrhoeae*, *C. trachomatis*, *M. genitalium* and *T. vaginalis*, and to test for antimicrobial resistant *N. gonorrhoeae* and *M. genitalium*.

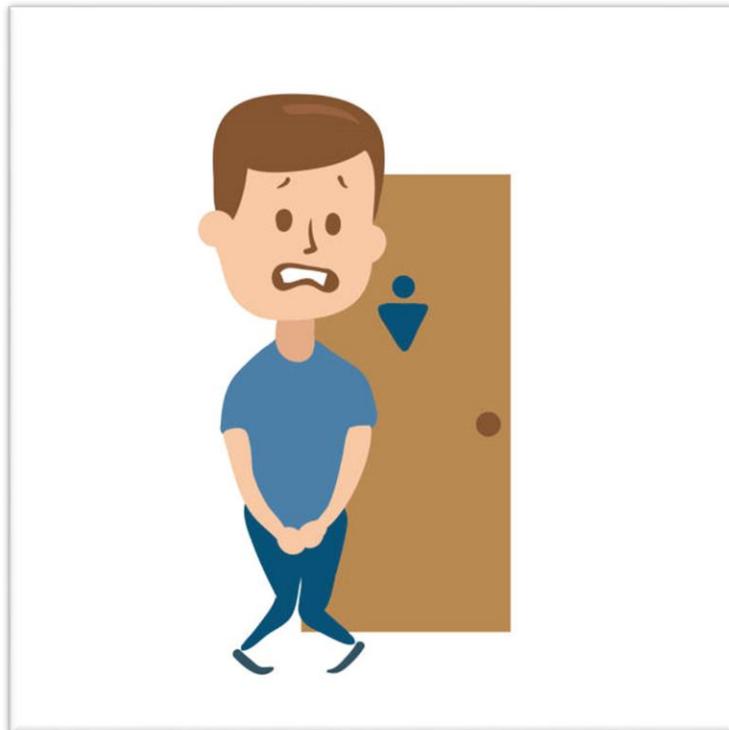
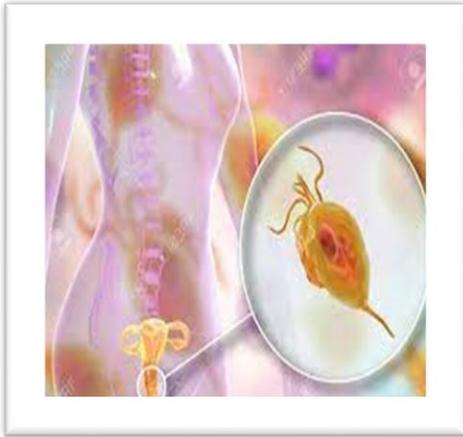


Table 5: Recommended treatment options for urethral discharge syndrome

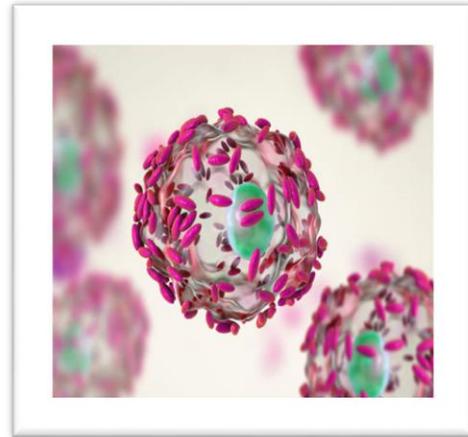
Infections covered	First line options	Effective substitutes
-N. gonorrhoeae And / or C. trachomatis	<p>-First choice A OR B A- Ceftriaxone 500 mg IM single dose PLUS Azithromycin 1 gram single dose</p> <p>B- Cefixime 400mg single dose orally PLUS Azithromycin 1 gram orally single dose.</p>	<p>- Doxycycline 100 mg orally twice daily for 7 days. *In complicated cases extend to 14 day treatment by Doxycycline.</p> <p>- Erythromycin 500 mg orally, 4 times a day for 7 days</p>
Additional therapeutic options in recurrent or persistent infections		
T. vaginalis	-Metronidazole 2g orally single dose	Metronidazole 500 mg twice daily for 7 days.
M. genitalium	Doxycycline 100mg orally twice daily for 7 days followed by Azithromycin 1g orally on day 1 then 500 mg daily for 2 days	Moxifloxacin 400mg orally for 7-10 days.

Note: in case of recurrent or persistent infections send for culture & sensitivity

Vaginal Discharge Syndrome



T.vaginalis



B.vaginosis



C.albicans

Vaginal Discharge Syndrome

Case definition: an abnormal vaginal discharge with change in the quantity, consistency, color or odor (with or without vulval itching or burning).

- Common Pathogens causes for Vaginal discharge in women is due to:
 - B.vaginosis,
 - T. vaginalis,
 - C. albicans.

- Vaginal Discharge Syndrome could be associated with cervical infections, the risk factors have also been frequently associated with cervical infections are:
 - ✚ being less than 21 years old (25 years in some places).
 - ✚ having more than one sex partner in the previous three months.
 - ✚ having a new partner in the previous three months.
 - ✚ having a current partner with an STI.

- Common pathogens causes for cervical infections in women is due to:
 - N. gonorrhoeae
 - C. trachomatis
 - Less common, such as M. genitalium as a causes of persistent or recurrent cervical infection

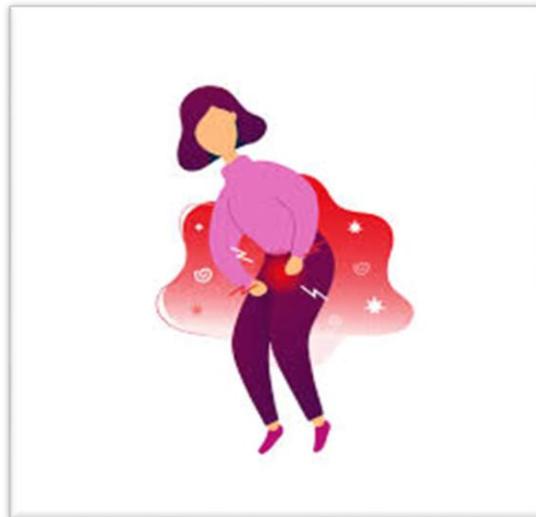
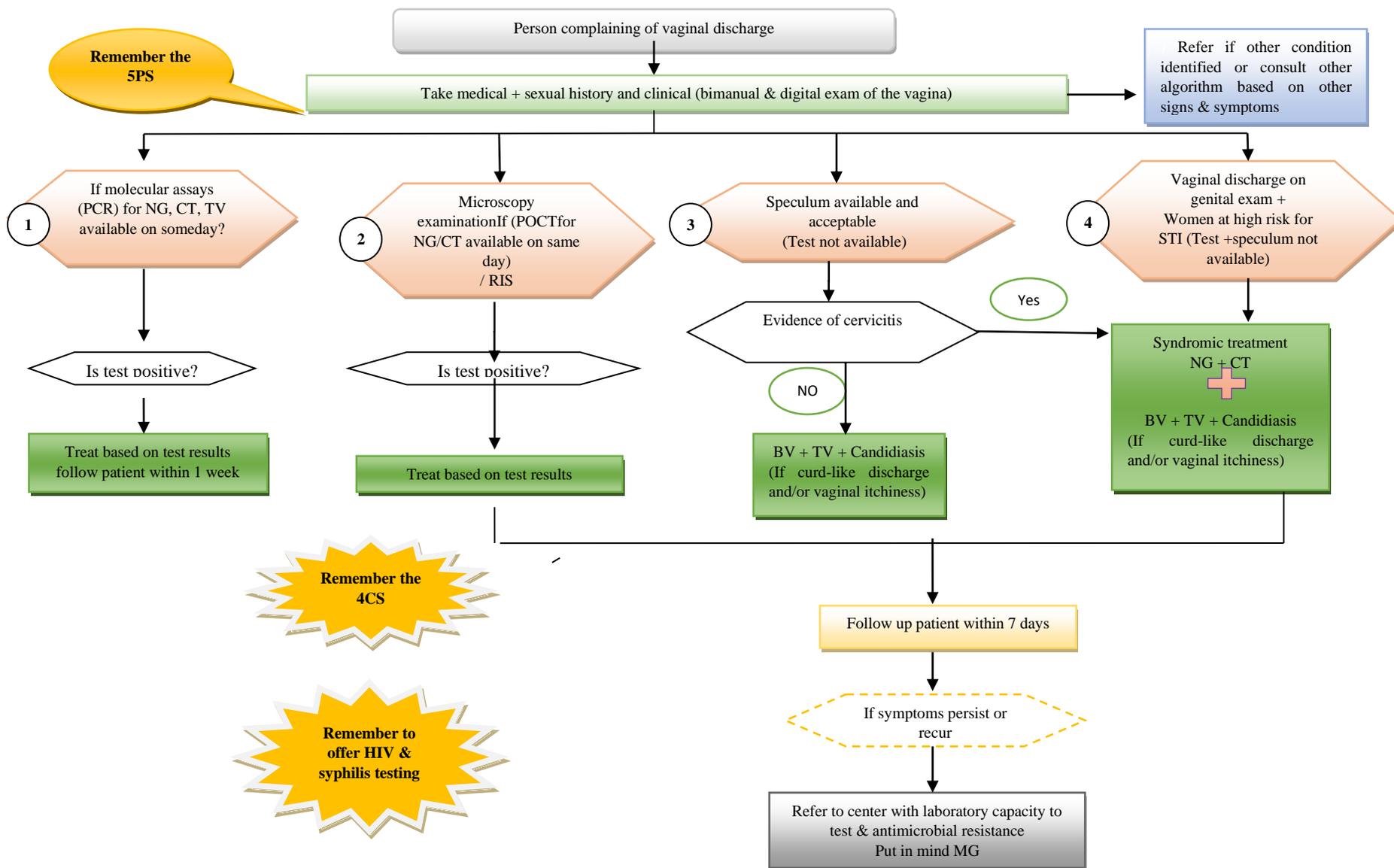


Table 6: Clinical characteristics of infectious causes of vaginal discharge syndrome & laboratory diagnosis

	Vaginal infection			Cervical infection	
Parameter	Vulvovaginal candidiasis	B.vaginosis	Trichomoniasis	N.gonorrhoeae	C. trichomonas
Signs & symptoms	Vulvar erythema and/or edema Discharge may be white and clumpy and may or may not adhere to vagina	Off-white/gray thin discharge that coats the vagina	Thin green-yellow discharge, vulvovaginal erythema	Speculum examination may reveal - A normal-looking cervix in the presence of endocervical infection. Or - The cervix may be erythematous or severely eroded and associated with a muco-purulent cervical discharge, the cervix may be friable and bleed easily on contact.	
Vaginal pH	4.0 to 4.5	>4.5	5.0 to 6.0		
Laboratory diagnosis					
Microscopy	dominate; squames +++; pseudohyphae (present in approximately 40% of patients); budding yeast for nonalbicans <i>Candida</i>	increased coccobacilli; clue cells comprise at least 20% of epithelial cells (present in >90% of patients)	mixed flora; motile trichomonas (present in approximately 60% of patients)	Gram-stained smears from the cervix are considered positive for the presumptive diagnosis of gonorrhoeae in women if intracellular).	
Molecular detection	DNA hybridization probe (eg, Affirm VPIII)	DNA hybridization probe (eg, Affirm VPIII)	Nucleic acid amplification test (eg, APTIMA T.vaginalis test)	become the recommended gold standard technology to diagnose and screen populations for C.	The nucleic acid amplification tests (NAATs) are the current gold standard for detection of <i>C. trachomatis</i> .
Culture methods (in persistence & recurrent)	Culture	Culture of no value	Culture	still the standard method for performing antimicrobial susceptibility testing.	The processing of <i>C. trachomatis</i> for culture requires highly experienced laboratories and technicians.

Figure 3: Flowchart for health-care provider to manage people complaining of vaginal discharge according to local availability of resources and preferences



Recommendations for the management of people complaining of vaginal discharge:

For people who complain of vaginal discharge, we recommend treatment for *N. gonorrhoeae* and/or *C. trachomatis* and/or *T. vaginalis* on the same visit. We suggest treatment based on the results of quality assured molecular assays for *N. gonorrhoeae* and/or *C. trachomatis* and/or *T. vaginalis*. In settings where treatment based on results of molecular assay in the same visit is not feasible, or where there is limited or no molecular testing, we suggest treatment based on testing with quality assured rapid point-of-care tests or on syndromic treatment.

Good practice includes:

- For people with recurrent or persistent vaginal discharge, good practice includes referring to a center with laboratory capacity to diagnose *N. gonorrhoeae*, *C. trachomatis*, *M. genitalium*, *T. vaginalis* and bacterial vaginosis and to test for antimicrobial resistant *N. gonorrhoeae* and *M. genitalium* (if there is one) or for a specialist's gynecological assessment, when no such testing is available in primary health care centers.



Table 7. Treatment options for vaginal infections

• Therapy for B.vaginosis and trichomoniasis PLUS • Therapy for yeast infection if curd-like white discharge, vulvo-vaginal redness and itching are present			
Infections covered	First line options	Effective substitutes	Note: In pregnancy, metronidazole should, ideally, be avoided in the first trimester
B.vaginosis And/or T.vaginalis	First choice A OR B A-Metronidazole 500 mg orally two times a day for 7days B-Metronidazole 2 grams orally in a single dose	- for (B.V only) Clindamycin 300 mg orally twice daily for 7 days - for (T.V only) Tinidazole 2 grams orally, single dose OR Tinidazole 500 mg orally twice a day for 5 days	Choose one only -Metronidazole 2grams orally in a single dose -Metronidazole gel 0.75%, one Full applicator(5 grams) intra-vaginally twice a day for 7 days -Clindamycin 300 mg orally twice a day for 7 days -Metronidazole 200mg or 250mg orally 3 times a day for 7 days -for (T.V only) Tinidazole 2grams orally, single dose Or Tinidazole 500mg orally twice a day for 5 days
C. albicans (yeast infection)	- Miconazole vaginal pessaries, 200 mg inserted at night for 3 nights OR -Clotrimazole vaginal tablet, 100 mg inserted at night for 7 nights	-Fluconazole 150 mg orally as single dose OR - Nystatin 200,000 units vaginal tablet inserted at night for 7 nights	-Miconazole 200 mg vaginal pessaries inserted once a day for 3 days OR -Clotrimazole vaginal tablet 100mg inserted at night for 7 days OR -Nystatinpessaries 200,000units inserted at night for 7 nights

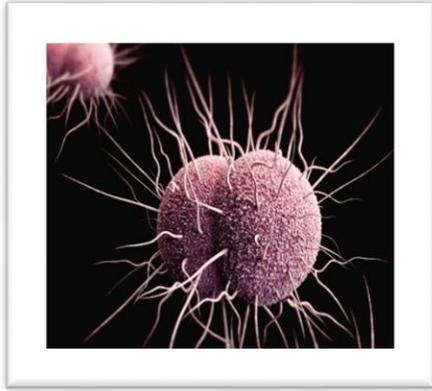
Note: (i) Patients taking metronidazole should be cautioned to avoid alcohol. (ii) Use of metronidazole in the first trimester is not recommended unless the benefits outweigh the potential hazards.

Table 8: Treatment options for cervical infection

Infections covered	First choice (Choose one from each cell below)	Effective substitutes	Options for pregnant women or during breastfeeding
N.gonorrhoeae And / or C. trachomatis	<p>-First choice A OR B A-Ceftriaxone 500mg IM single dose PLUS Azithromycin 1gram single dose</p> <p>B-Cefixime 400mg single dose orally PLUS Azithromycin 1 gram orally single dose.</p>	<p>-Doxycycline 100mg orally twice daily for 7days. *In complicated cases extend to 14 day treatment by Doxycycline.</p> <p>-Erythromycin 500 mg orally, 4 times a day for 7 days</p>	<p>Ceftriaxone 500mg IM single dose PLUS Azithromycin 1gram orally single dose OR Cefixime 400mg orally single dose PLUS Azithromycin 1gram orally single dose</p>
Additional therapeutic options in recurrent or persistent infections*			
M.genitalium	<p>-Doxycycline 100 mg orally twice daily for 7 days followed by Azithromycin 1g orally on day 1 then 500 mg daily for 2 days</p>	<p>-Moxifloxacin 400mg orally for 7-10 days.</p>	<p>Azithromycin 500gram orally at day 1 followed by 250 mg daily for 2-5 days (absence of macrolide resistance)</p>

***Note:** in case of recurrent or persistent infections, send for culture & sensitivity.

Lower Abdominal Pain (PID)



N. gonorrhoeae



C. trachomatis



M. genitalium



facultative gram negative bacteria

Lower Abdominal Pain

Case definition: Pelvic inflammatory disease (PID) refers to acute and subclinical infection of the upper genital tract in women, involving any or all of the uterus, fallopian tubes, and ovaries; this is often accompanied by involvement of the neighboring pelvic organs.

It results in endometritis, salpingitis, oophoritis, peritonitis, perihepatitis, and/or tube-ovarian abscess

- Common Pathogens causes for PID in women is due to :
 - N. gonorrhoeae,
 - C. trachomatis,
 - Anaerobic bacteria, (Facultative Gram-negative rods)
 - M. genitalium

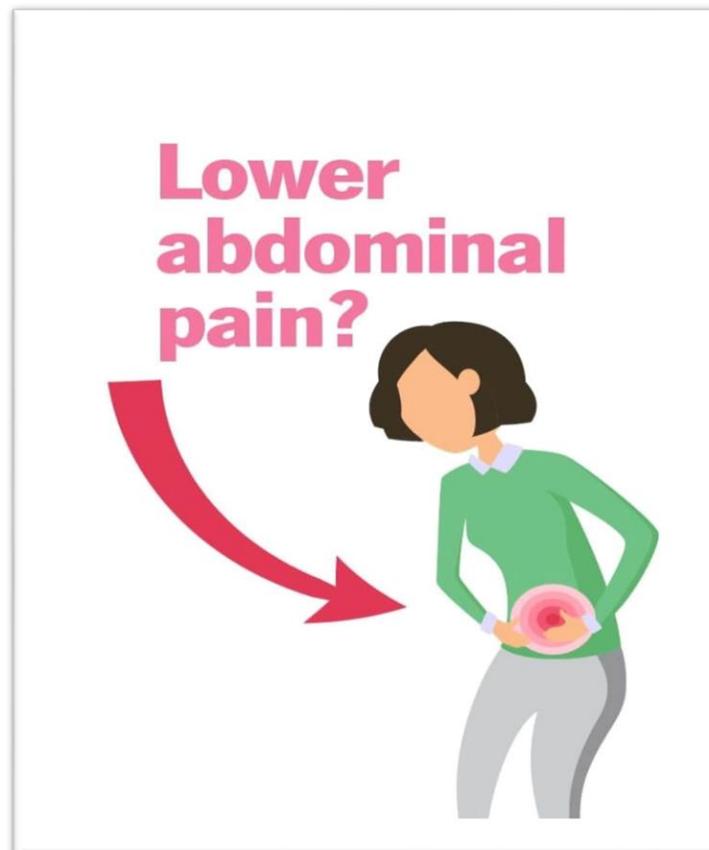
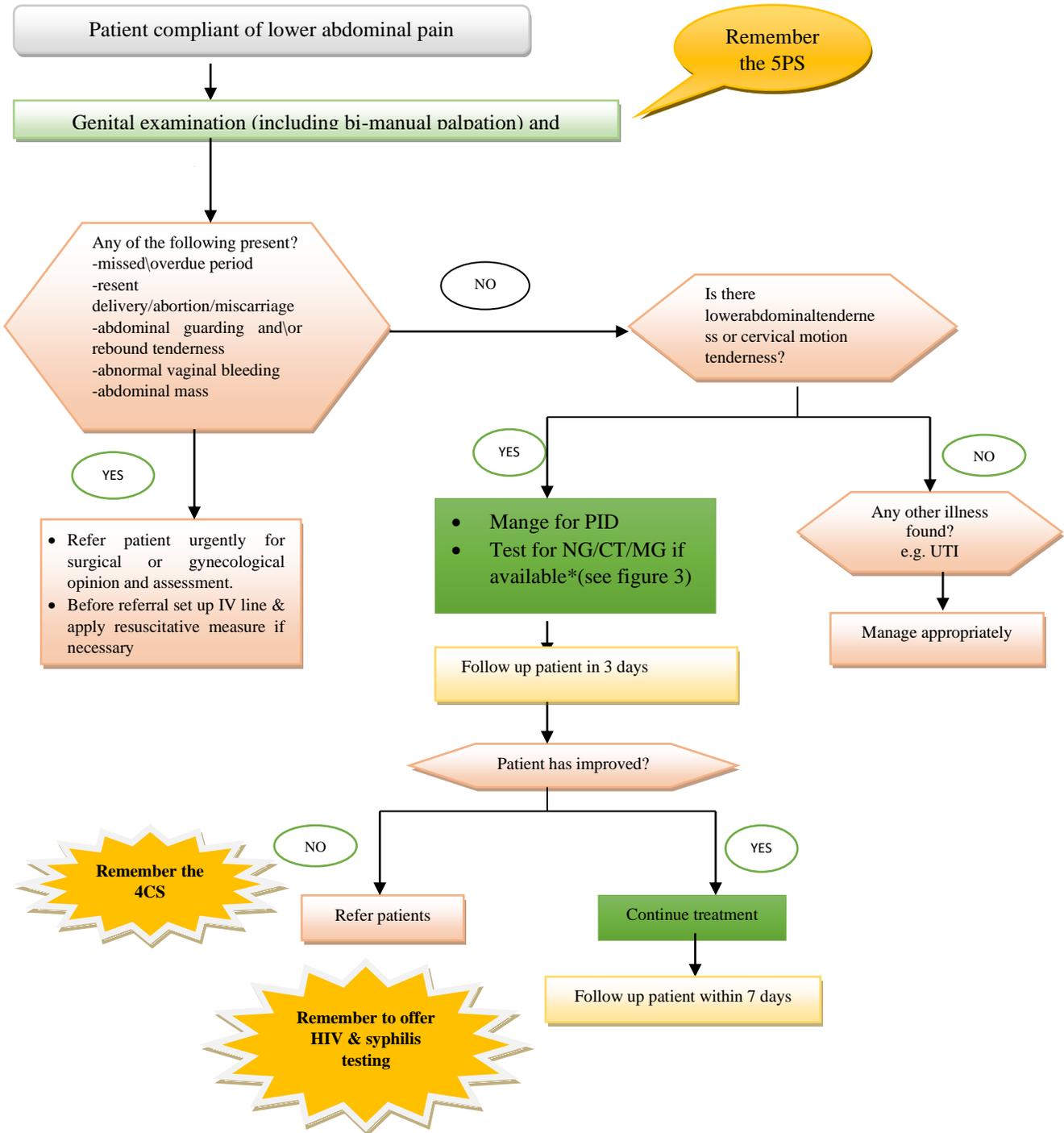


Figure 4.flow chart for the mangnt of lower abdominal pain



Recommendations for management of women with lower abdominal pain:

Good practice includes:

- + Performing a physical examination, including abdominal and pelvic examination to assess for pelvic inflammatory disease, surgical conditions or pregnancy, and Vulvo-vaginal
- + Taking a medical and sexual history and assessing risk for STIs;
- + cervical motion tenderness
- + examination to visualize any lesions, overt genital discharge, vulvar erythema and excoriations;

Performing a bimanual digital examination of the vagina to

1. assess for cervical motion tenderness or pain with palpation of the pelvic area to exclude pelvic inflammatory disease;
2. assess for the presence of vaginal discharge and the color and consistency of the discharge on the glove;
3. Offering HIV and syphilis testing and other preventive services as recommended in other guidelines.

For sexually active women with lower abdominal pain with any of the following features on clinical examination (bimanual palpation)

- + cervical motion tenderness
- + lower abdominal tenderness we suggest to:

1. Treat for PID on the same visit.
2. Test for *N. gonorrhoeae* and *C. trachomatis* and, if available, *M. genitalium*, to support partner management when tests are available.
3. Schedule follow-up assessment in 3 days to assess for clinical improvement, and if the woman has not improved, refer for further assessment.

For women with lower abdominal pain with any of the following conditions, good practice includes referral to surgical or gynecological assessment:

- + Missed/overdue period recent delivery/abortion/miscarriage
- + Abdominal guarding and/or rebound tenderness
- + Abnormal vaginal bleeding in excess of spotting
- + Abdominal mass
- + Detection of suspect cervical lesion

Good practice include:

For sexually active women with lower abdominal pain with any of the following features on clinical examination (bimanual palpation)

- + cervical motion tenderness
- + lower abdominal tenderness

We suggest to:

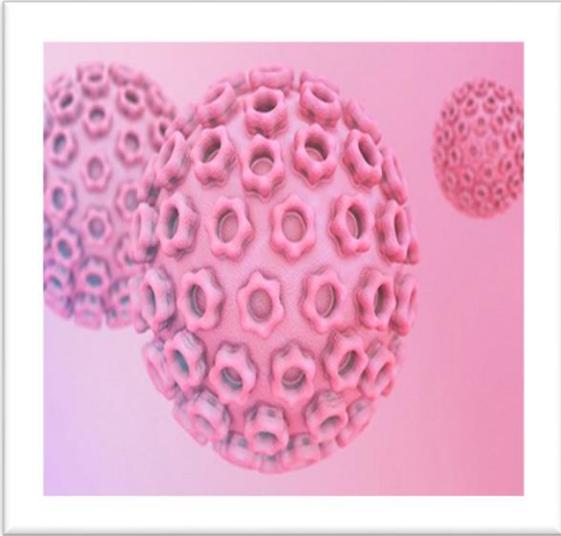
- + Treat for PID on the same visit.
- + Test for *N. gonorrhoeae* and *C. trachomatis* and, if available, *M. genitalium*, to support partner management when tests are available.
- + Schedule follow-up assessment in 3 days to assess for clinical improvement, and if the woman has not improved, refer for further assessment.

Table9: Treatment options for Pelvic Inflammatory Disease

Infections covered	First choice(Choose one from each cell below)	Effective substitutes
For Outpatient the recommended treatment		
N. gonorrhoeae and/or C. trachomatis	First choice A OR B A-*Ceftriaxone 1g IM for 7days PLUS Azithromycin 1g orally, single dose. B- Doxycycline 100mg orally twice daily for 7 days.	-In complicated cases extend to 14 day treatment by Doxycycline. - Erythromycin 500mg orally, 4times a day for 7days
Anaerobes	Metronidazole 500mg orally two times a day for 14days	Clindamycin cap.300-900mg 3times/day (depend on severity)for 7-14 days (could be oral or IV)

* A&B choice covers (N. gonorrhoeae +C.trachomatis) treatment

Genital Ulcer



HSV



T. pallidum

Genital Ulcer

Case definition: refers to breaks in the skin or mucosa and may present as ulcers, sores, or vesicles. Located on the genital or anal areas and which may be painful or painless with or without regional lymphadenopathy, caused by a number of (STIs) and non-STI-related conditions.

Table 10: Clinical characteristics of infectious causes of genital ulcer & laboratory diagnosis

Parameter	Herpes simplex Herpes simplex virus type 2 & 1	Syphilis T. pallidum
Symptoms & Signs	<ul style="list-style-type: none"> • Grouped vesicles evolving toward superficial circular ulcers on an erythematous base • Ulcers usually painful and/or pruritic • Smooth margin and base • Enlarged, non-fluctuant and tender inguinal lymph nodes most common in primary infection • Constitutional symptoms, such as fever, malaise and pharyngitis, are common with primary infection 	<ul style="list-style-type: none"> • Papule evolving to a painless chancre • Indurated with serous exudates • Single ulcer in 70% of cases • Smooth margin and base • If they occur on concealed areas, such as the rectum, the cervix, or the pharynx, they may be missed by the patient. • Firm, enlarged, non-fluctuant, non-tender lymphadenopathy is common
Laboratory diagnosis		
Microscopy		<ul style="list-style-type: none"> • In primary, treponemes from lesions of primary syphilis observed A negative dark-field result does not exclude syphilis. • Syphilitic treponemes can be observed from lesions of secondary syphilis, (condylomatalata& mucous patches)
Serology	<ul style="list-style-type: none"> • The usefulness of testing is only by demonstrating a seroconversion from a negative at the time of the lesions to a positive result 6 to 12 weeks later. • Type-specific antibody tests exist to distinguish between HSV-1 and HSV-2. have limited value in diagnosis. 	<ul style="list-style-type: none"> • 1st approach using (VDRL) followed by (TPHA) on the positive samples. • 2nd approach uses a treponemal test TPHA/RST and a quantitative (VDRL) to confirm the positives. <p>-(VDRL) & (TPHA) tests are negative in the early phase of primary syphilis, -(VDRL) & (TPHA) tests are almost always reactive (positive) in secondary syphilis & usually in high titer</p>
Molecular detection	PCR testing can directly detect HSV DNA from swabs of genital lesions	PCR testing can directly detect T. pallidum from lesion samples
Culture methods	confirmation of diagnosis determination of resistance to antiviral therapy the Culture from vesicles has the highest yield of about 94%.	

Table 11. Reactivity of serological tests by stage of syphilis and effect of treatment

	Primary	Secondary	Early latent	Late latent	Tertiary
VDRL (untreated)	Negative becoming positive	Always positive	Usually positive	Usually positive	Usually positive, but becoming negative
TPHA (untreated)	Negative becoming positive (early)	Always positive	Always positive	Always positive	Usually positive, eventually becoming negative
Effect of treatment by stage of infection					
VDRL (treated)	becoming negative	becoming negative	becoming negative	Remains positive	Result unchanged
TPHA (treated)	Remains positive if initially positive	Remains positive	Remains positive	Remains positive	Result unchanged

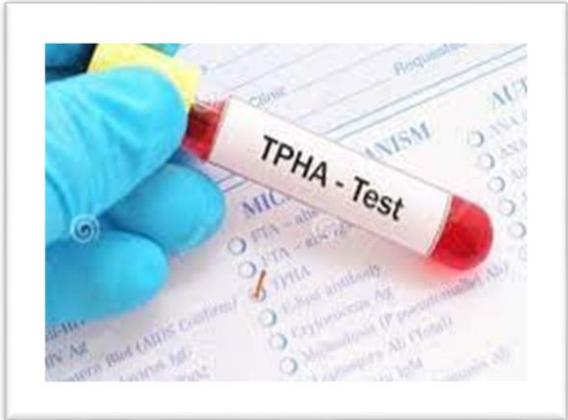
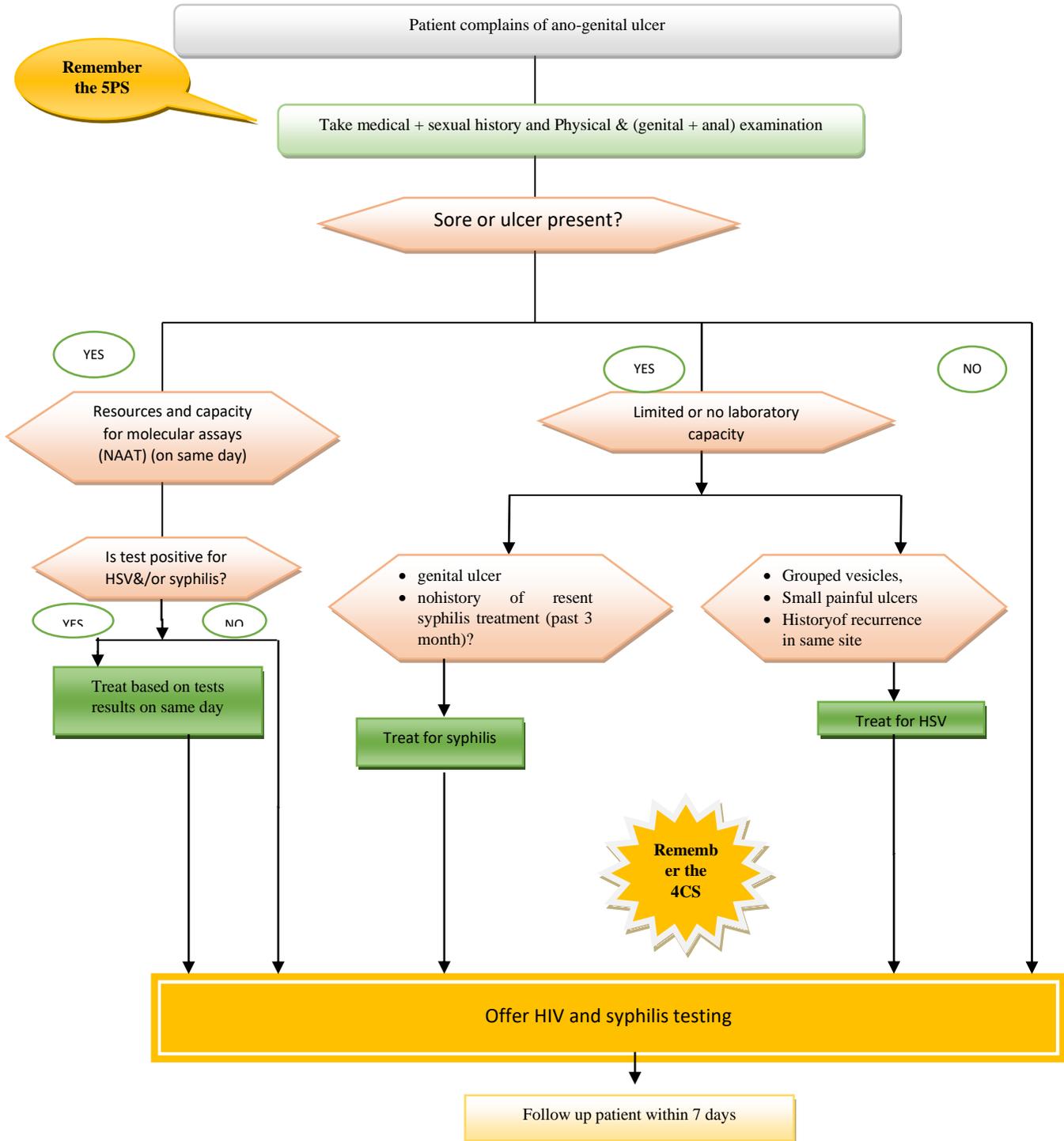


Figure 5.Flowchart for people who present with ano-genital ulcers (including ulcers, vesicles, or sores on genitals and anorectal sites)



Recommendations and treatment options for GU

For people who present with genital ulcers (including anorectal ulcers), we recommend

- Treatment based on quality assured molecular assays of the ulcer.

Syndromic treatment to ensure treatment on the same day of visit, in settings where there is limited or no molecular tests or laboratory capacity, we recommend syndromic treatment to ensure treatment on the same day of visit .

Good practice include:

- + Performing serologic tests for syphilis, including an RPR-equivalent test (VDRL ,TPHA), if available, to attempt to identify active syphilis and for monitoring response to treatment.
- + Referring men with persistent anogenital ulcers to a centre with laboratory capacity and expertise to diagnose herpesor less common pathogens (LGV, Donovanosis,) and other genital/gastrointestinal and skinconditions.

Treatment of genital ulcer disease, including perinatal and anal ulcers:

1-Syndromic management: should include

- + Treatment for syphilis, unless there has been treatment for syphilis within the past 3 months.
- + Treatment for herpes simplex virus.

2-Suppressive therapy may be proposed and preferred to episodic treatment for

- + Persons with recurrent ulcers 4 to 6 episodes or more a year or with severe symptoms or causing distress.

The patient on suppressive therapy may be assessed after one year and evaluated whether the patient wishes to continue or to change to episodic therapy.

In person with HIV or immunosuppressed individuals, dose adjustment is recommended for Valaciclovir and Famciclovir, but not for Acyclovir.

- + For recurrent episodes, Valaciclovir 500 mg is recommended for 5 days instead of 3 days and Famciclovir is recommended at a dose of 500 mg twice daily for 5 days instead of 250 mg.
- + For suppressive therapy, Valaciclovir is recommended at 500 mg twice daily instead of once daily and Famciclovir at 500 mg twice daily of 250 twice daily.

3-Performing serologic tests for syphilis, including a VDRL test, if available, to attempt to identify active syphilis and for monitoring response to treatment.

4-Referring men with persistent anogenital ulcers to a center with laboratory capacity and expertise to diagnose herpes or less common pathogens (LGV, Donovanosis, chancroid/ only in geographical settings where cases are reported or emerging.) and other genital/gastrointestinal conditions.

5-Providing analgesics for pain

6-Patients who report allergies to penicillin

- + Should be treated with the effective alternatives for the treatment of syphilis, which include doxycycline or erythromycin

7-The pregnant women

- + Treated with erythromycin do not cross the placental barrier completely, and as a result, the fetus is not treated. It is, therefore, necessary to treat the newborn infant soon after delivery

Table 12: Treatment options for GU

Multiple dose therapy for herpes simplex virus infection PLUS single dose long-acting penicillin therapy or multi- dose therapy alternatives			
Infections covered	First line options	Effective substitutes	If woman is pregnant, breastfeeding or patient under 16 years old
Genital herpes	Primary infection		
	Acyclovir 400mg orally 3 times a day for 10 days OR Acyclovir 200mg orally 5 times a day for 10 days	Valaciclovir 500mg twice a day for 10 days OR Famciclovir 250mg orally 3 times a day for 10 days	Use acyclovir only when benefit outweighs risk. Dosage is the same as for primary infection in non-pregnancy.
	Recurrent infection – episodic therapy		
	Acyclovir 400mg orally 3 times a day for 5days OR Acyclovir 800mg orally 2 times a day for 5days OR Acyclovir 800mg 3times a day for 2days	Valaciclovir 500mg twice a day for 5days OR Famciclovir 250mg orally twice daily for 5 days	Acyclovir 400mg orally 3times a day for 5days OR Acyclovir 800mg orally 2times a day for 5 days OR Acyclovir 800mg 3 times a day for 2 days
	Suppressive therapy for recurrent herpes		
	Acyclovir 400mg orally twice daily OR Valaciclovir 500mg once daily	Famciclovir 250mg orally twice daily	Acyclovir 400mg orally twice daily OR Valaciclovir 500mg once daily
Syphilis (early) (Treatment for primary)	Benzathine penicillin 2.4million units IM in a single dose	Doxycycline 100mg orally twice a day for 21-28 days OR Erythromycin 500mg 4 times a day for 14 days	Benzathine penicillin 2.4million units IM in a single dose OR Erythromycin 500mg orally 4 times a day for 14 days

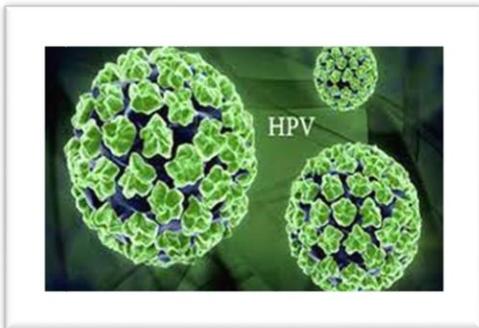
Ano-rectal Discharge



N. gonorrhoeae



T. pallidum



HPV



HSV

Ano-rectal Discharge

Case definition: specific risk sexual behaviors associated with anorectal infections include receptive anal sex. Anorectal symptoms and sexually transmitted anorectal infections are prevalent in populations most at risk (MSM/FSW/Transgender individuals/Heterosexual women who have had receptive anal intercourse with men with STIs).

Table 13: Clinical characteristics of infectious causes of anorectal infection& laboratory diagnosis

Parameter	Ano-rectal Discharge		
Type	Anal infections <ul style="list-style-type: none"> • a common site for pathogens such as HPV, HSV & syphilis; 	Proctitis <ul style="list-style-type: none"> • a common site for pathogens such as gonococcal, chlamydial infections & HSV. 	Proctocolitis <ul style="list-style-type: none"> • a common site for Shigella, Campylobacter, Salmonella, cytomegalovirus & amoebiasis
Symptoms	<ul style="list-style-type: none"> • Anorectal infections may be associated with anorectal pain, itching, discharge, bleeding, a sensation of rectal fullness, tenesmus, constipation, & mucus streaking of stools. • Asymptomatic anorectal infections are not uncommon 		
Signs	<ul style="list-style-type: none"> • External examination of the anus (It may be the only practical procedure to observe a discharge, ulcers or external warts. • Ano-scopic examination (in most primary point-of-care settings an anoscope is not available,) 		
Laboratory diagnosis/ Ano-scopic examination can be used to take samples for			
Microscopy	1- Gram-stained smear for N. gonorrhoeae and for leukocytes 2-Dark-field microscopy for T. pallidum,		
Molecular assay	NAAT for Chlamydia		
Culture	Culture of N. gonorrhoeae		

Recommendations for management of anorectal discharge

For people who complain of anorectal discharge and report receptive anal sex, we recommend management based on results of quality assured molecular assays. However, in settings where there is limited or no molecular tests or laboratory capacity, we recommend syndromic treatment to ensure treatment on the same day of visit.

Good practice includes:

- Following the genital ulcer guidelines if ulceration is present
- Referring people with persistent anorectal discharge to a centre with laboratory capacity to diagnose *N. gonorrhoeae*, *C. trachomatis* (including LGV serovars), *M. genitalium*, and determine antimicrobial resistance for *N. gonorrhoeae* and *M. genitalium*.

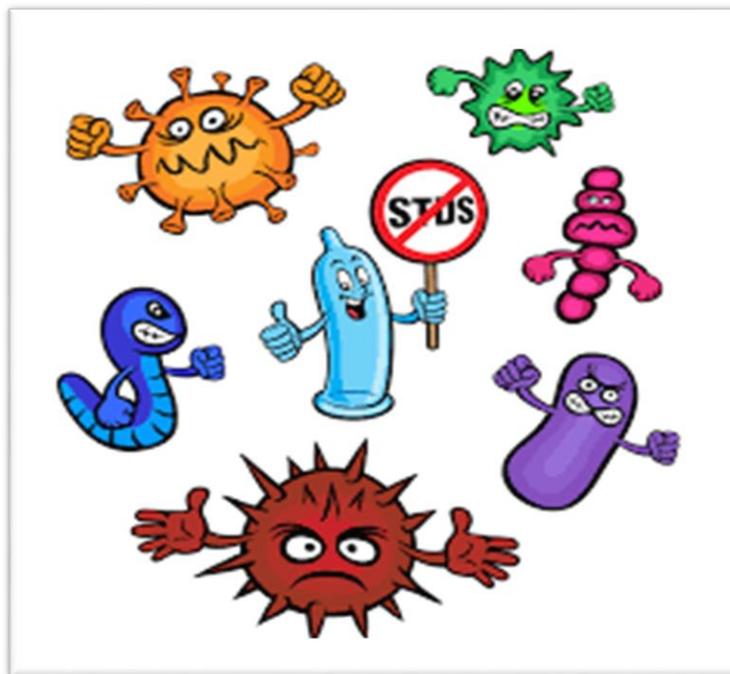


Figure 6. Flowchart for people complaining of anorectal discharge

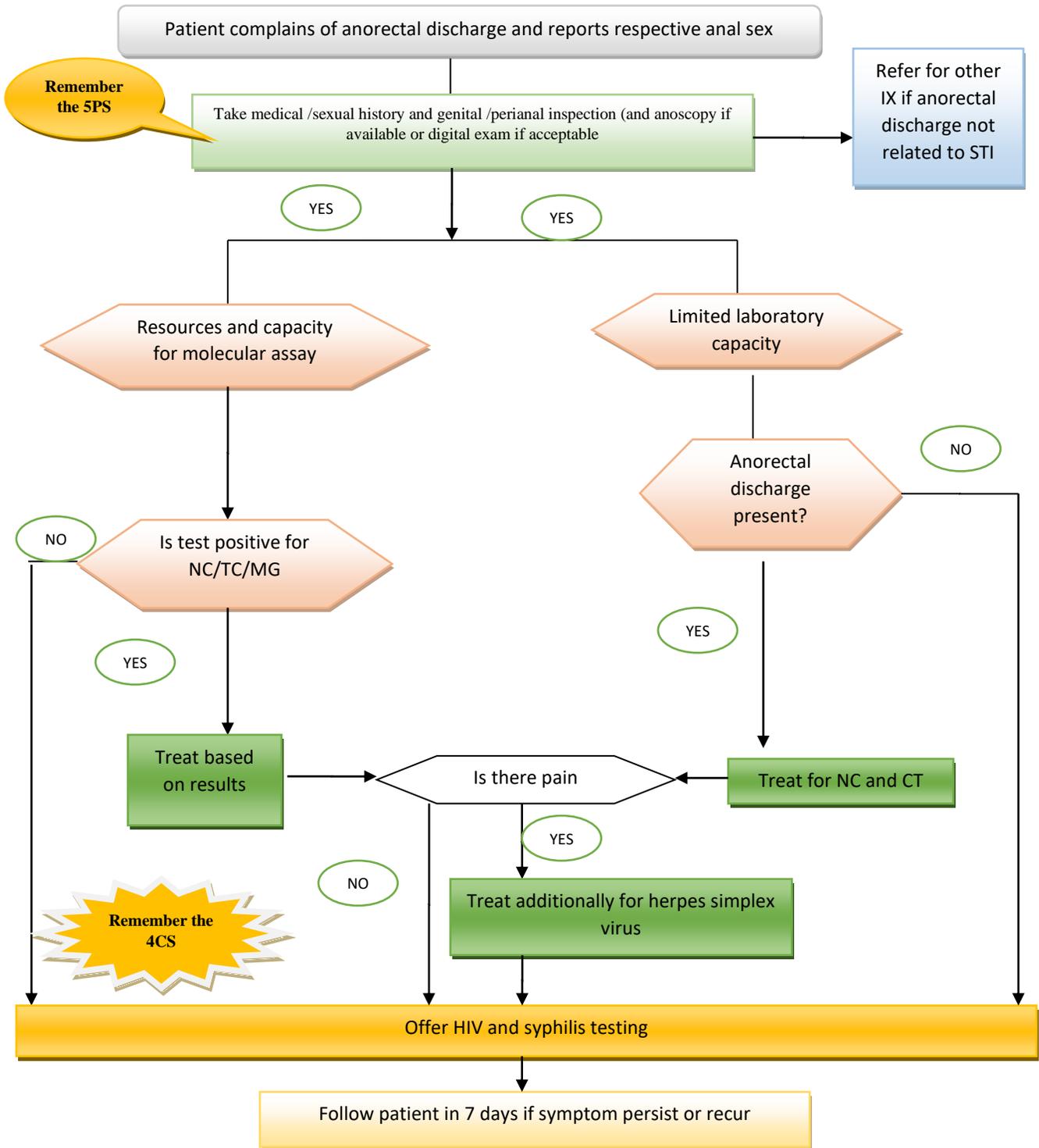


Table14. Treatment options for people presenting with anorectal discharge

Infections covered	Recommended choice	Effective substitutes
<p>N. gonorrhoeae and/or C. trachomatis</p>	<p>First choice A OR B A-Ceftriaxone 500mg IM single dose PLUS Azithromycin 1 gram orally single dose. B-Cefixime 400mg orally single dose PLUS Azithromycin 1gram orally single dose.</p>	<p>-Doxycycline 100mg orally twice daily for 7days or 21days. -Erythromycin 500mg orally 4times a day for 14 days.</p>
<p>Syphilis (if ulcer present)</p>	<p>Benzathine penicillin 2.4million units IM in a single dose Note: patients with a positive syphilis test and no ulcer, administer the same dose at weekly intervals for a total of 3 doses</p>	<p>Doxycycline 100mg orally, twice a day for 14 days Erythromycin 500mg 4times a day, orally, for 14 days Note: Extend treatment to 30days if syphilis serology is positive</p>
<p>Genital herpes</p>	<p>Recurrent infection</p>	
	<p>Acyclovir 400 mg orally 3 times a day for 5days OR Acyclovir 800 mg orally 2 times a day for 5days</p>	<p>Valaciclovir 500mg twice a day for 3 days</p>
	<p>Primary genital herpes</p>	
	<p>Acyclovir 400 mg orally 3 times a day for 10 days OR Acyclovir 200 mg 5 times a day for 10 days</p>	<p>Valaciclovir 500 mg orally twice daily for 10 days</p>
	<p>Suppressive therapy for recurrent herpes</p>	
<p>Acyclovir 400 mg orally twice daily OR Valaciclovir 500 mg once daily</p>	<p>Famciclovir 250 mg orally twice daily (NB Famciclovir 500 mg twice daily for PLHIV or immunocompromised)</p>	

Scrotal Swelling

Inflammation of the epididymis (epididymitis). The adjacent testis is often also inflamed (orchitis), giving rise to epididymo-orchitis

In men under 35 years this is more frequently caused by sexually transmitted organisms than in those over 35 years. When the epididymitis is accompanied by urethral discharge, it should be presumed to be of sexually transmitted origin, commonly gonococcal and/or chlamydial in nature.

Testicular torsion, which should be suspected when onset of scrotal pain is sudden, is a surgical emergency that needs urgent referral. If not effectively treated, STI-related epididymitis may lead to infertility.

Table 15: Clinical characteristics of infectious causes of Scrotal Swelling and laboratory diagnosis

Parameter	Scrotal Swelling	
Type	N. gonorrhoeae	C. trachomatis
Symptoms& Signs	Acute onset of unilateral testicular pain and swelling, with tenderness of the epididymis and vas deferens, and occasionally with erythema and edema of the overlying skin.	
Laboratory diagnosis		
Microscopy	Light microscopic Gram staining to detect intracellular Gram-negative diplococci within polymorph nuclear leucocytes for the presumptive diagnosis of gonorrhoeae. The immunofluorescence can be used to detect, C. trachomatis	
Molecular detection	PCR	
Culture methods	Culture for identification of C. trachomatis + N. gonorrhoeae	

Figure 7. Flowchart Scrotal Swelling

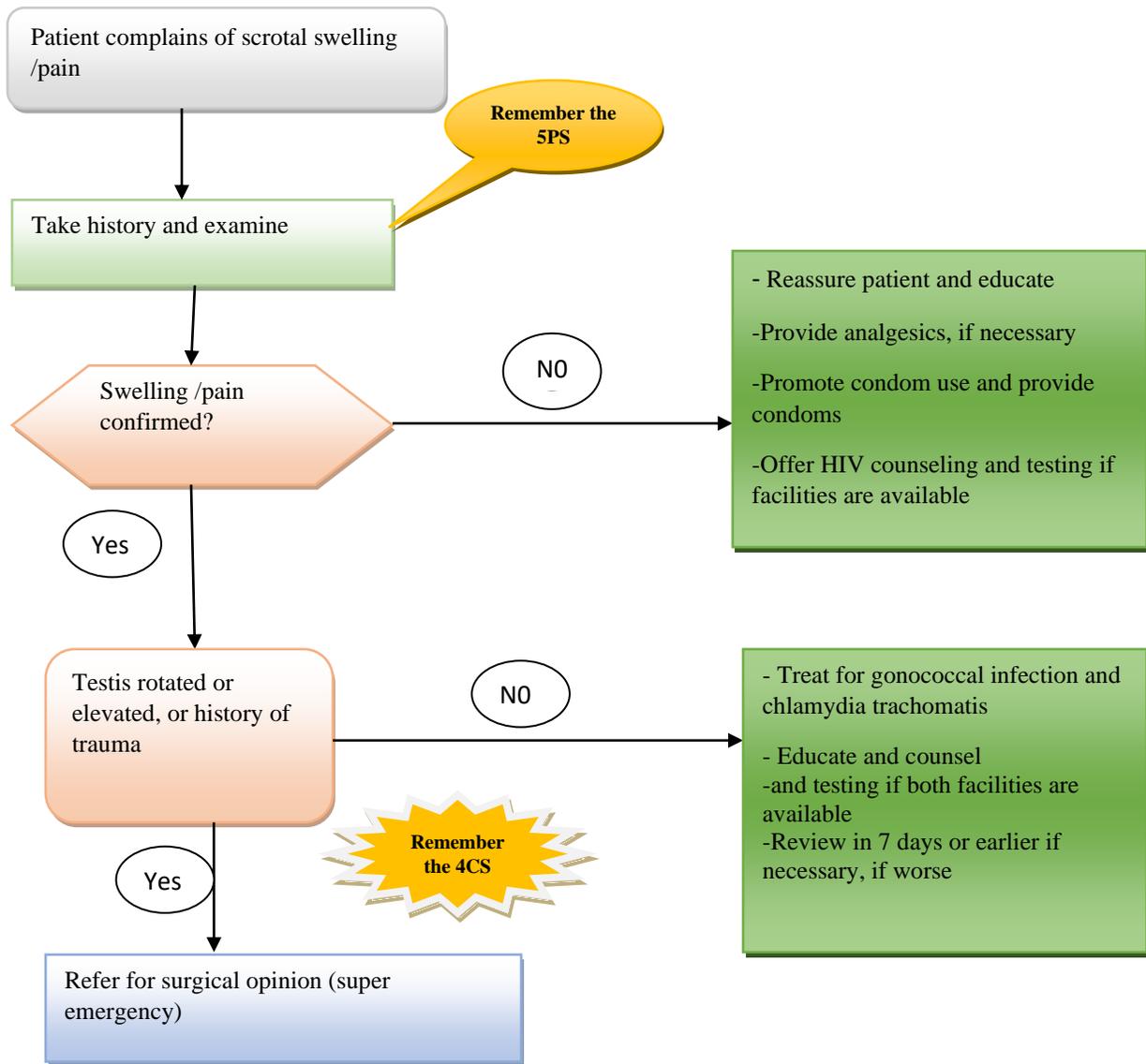
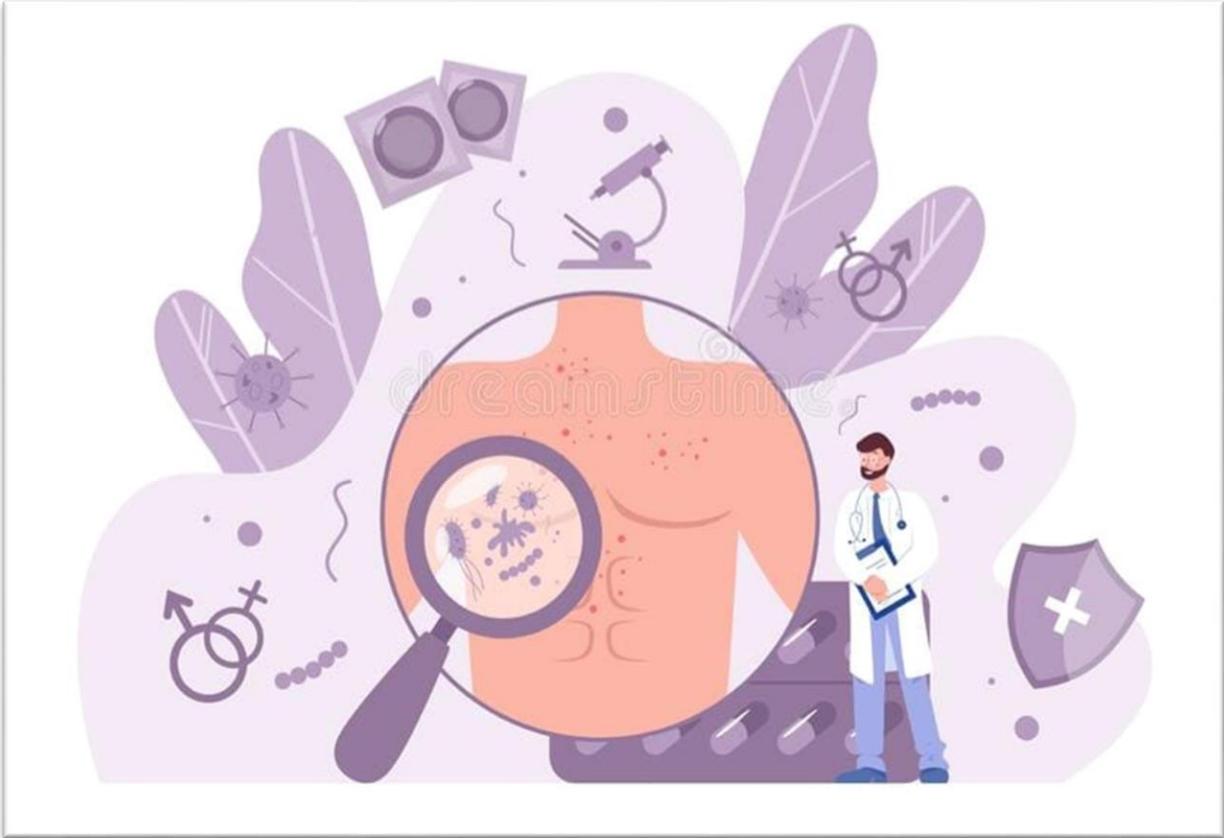


Table16. Treatment options for scrotal swelling (Epididymitis)

Infections covered	Recommended choice
For acute epididymitis most likely caused by sexually transmitted <i>N. gonorrhoeae</i> and <i>C. trachomatis</i> .	Ceftriaxone 500 mg IM in a single dose PLUS Doxycycline 100 mg orally twice a day for 10 days



Neonatal Conjunctivitis

Casedefinition: marked bilateral purulent discharge and local inflammation within (3-5) days after delivery.

Infectious neonatal conjunctivitis is typically contracted during vaginal delivery even mothers (asymptomatic) from exposure to bacteria from the birth canal.

It is a serious conditions leading to permanent blindness if not treated properly in time.

- The common pathogens causes are due to:
 - N. gonorrhoeae
 - C. trachomatis

Table 17: Clinical characteristics of infectious causes of Neonatal conjunctivitis& laboratory diagnosis

Parameter	Neonatal Conjunctivitis	
Type	N. gonorrhoeae	C. trachomatis
Symptoms& Signs	Every newborn baby presenting with eye discharge within 1 day to 7days after birth should be carefully examined for ophthlmianeonatorum. <ul style="list-style-type: none"> • Unilateral or bilateral involvement of eye-redness • Swelling of eyelids • Purulent discharge 	
Laboratory diagnosis		
Microscopy	Take a swab from eye discharge and perform gram- stain. If intracellular diplococci present, treat for gonorrhoeae, and if diplococcic not found, then treat for Chlamydia	
Molecular detection	(PCR) to detect C. trachomatis and N. gonorrhoeae	
Culture methods	Culture on chocolate agar and/or Thayer-Martin for N. gonorrhoeae& other bacteria	

Recommendations for management of infected child's mother:

Take proper history, examination and send her for laboratory investigations and treated her accordingly.

Figure 8.Flow chart of Neonatal Conjunctivitis

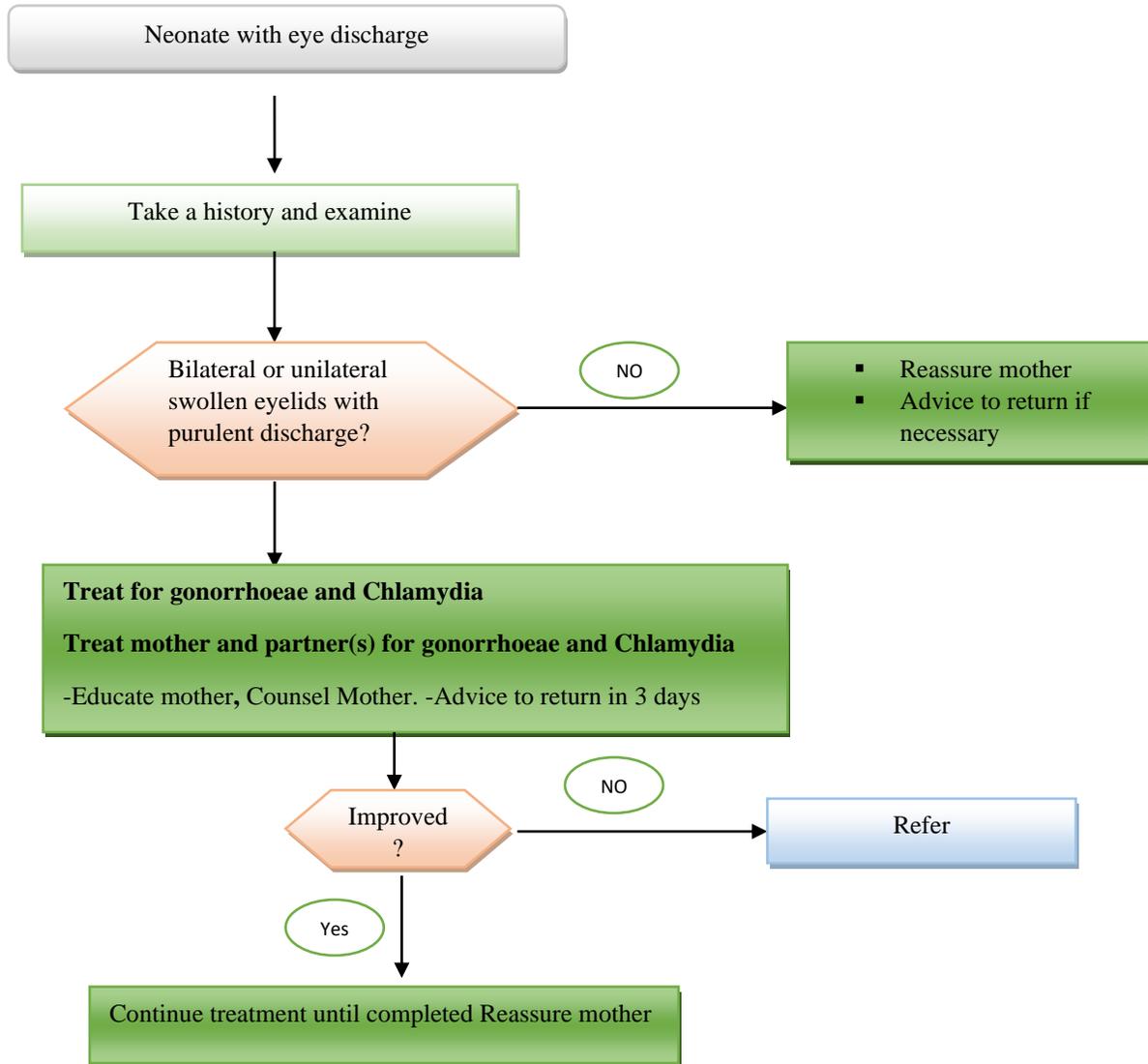
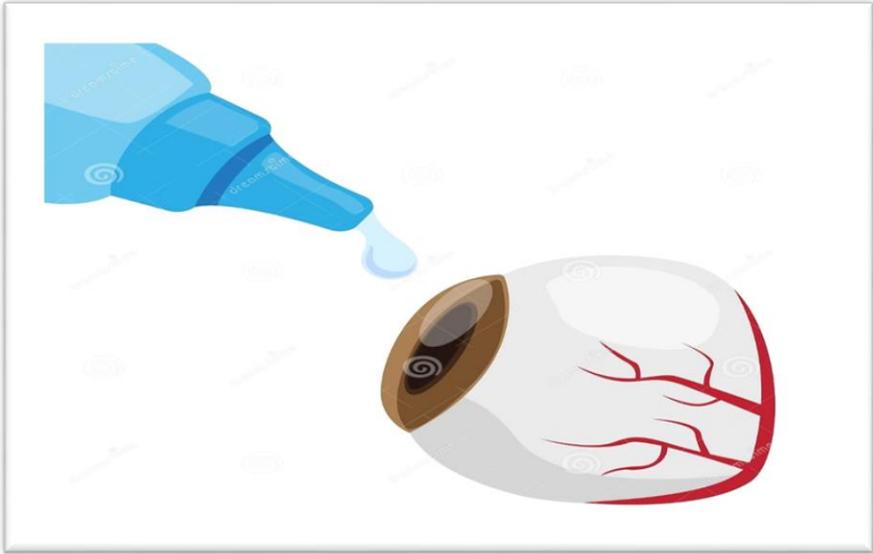


Table18. Treatment options for treatment Neonatal Conjunctivitis

Infections covered	Recommended choice
<p>N.gonorrhoeae and/or C.trachomatis</p>	<p>AGE from 0 to 7 days choose one: A- Ceftriaxone IM: 50 mg/kg single dose(max.125 mg) B- Cefotaxime IM: 100 mg/kg single dose</p> <p>Plus one of below regimen A- Oral erythromycin 12.5 mg/kg/dose, four times daily, 14 days. B- oral azithromycin, 20mg/kg, once daily, for 3 days,</p>

Note: When systemic treatment is not immediately available, clean both eyes and apply 1% tetracycline eye ointment every hour, until systemic treatment is available.

Follow up: Patient should be reviewed after 72 hours.



Inguinal Bubo (LarbiArbiDibble)

Case definition: acute infection of either the lower limbs or genital region may cause inguinal adenopathy.

Table 19: Clinical characteristics of infectious causes of Inguinal Bubo & laboratory diagnosis

Parameter	Inguinal Bubo (LarbiArbi Dibble)
Type	LymphoGranulomaVenereum <i>C.trachomatis</i> L1-L3
Symptoms & Signs	localized enlargements of the lymph nodes in the groin area, which are painful and may be fluctuant, adult a sexually active presents with an inguinal bubo not associated with genital ulcer,
Laboratory diagnosis	
Microscopy	Direct immunofluorescence
Molecular detection	Nucleic acid detection
Culture methods	Culture for identification of <i>C. trachomatis</i> L1-L3 Culture on special media for identification of <i>H.ducreyi</i> (is not widely available from commercial sources)

Figure 9: Inguinal Bubo (LarbiArbiDibble)

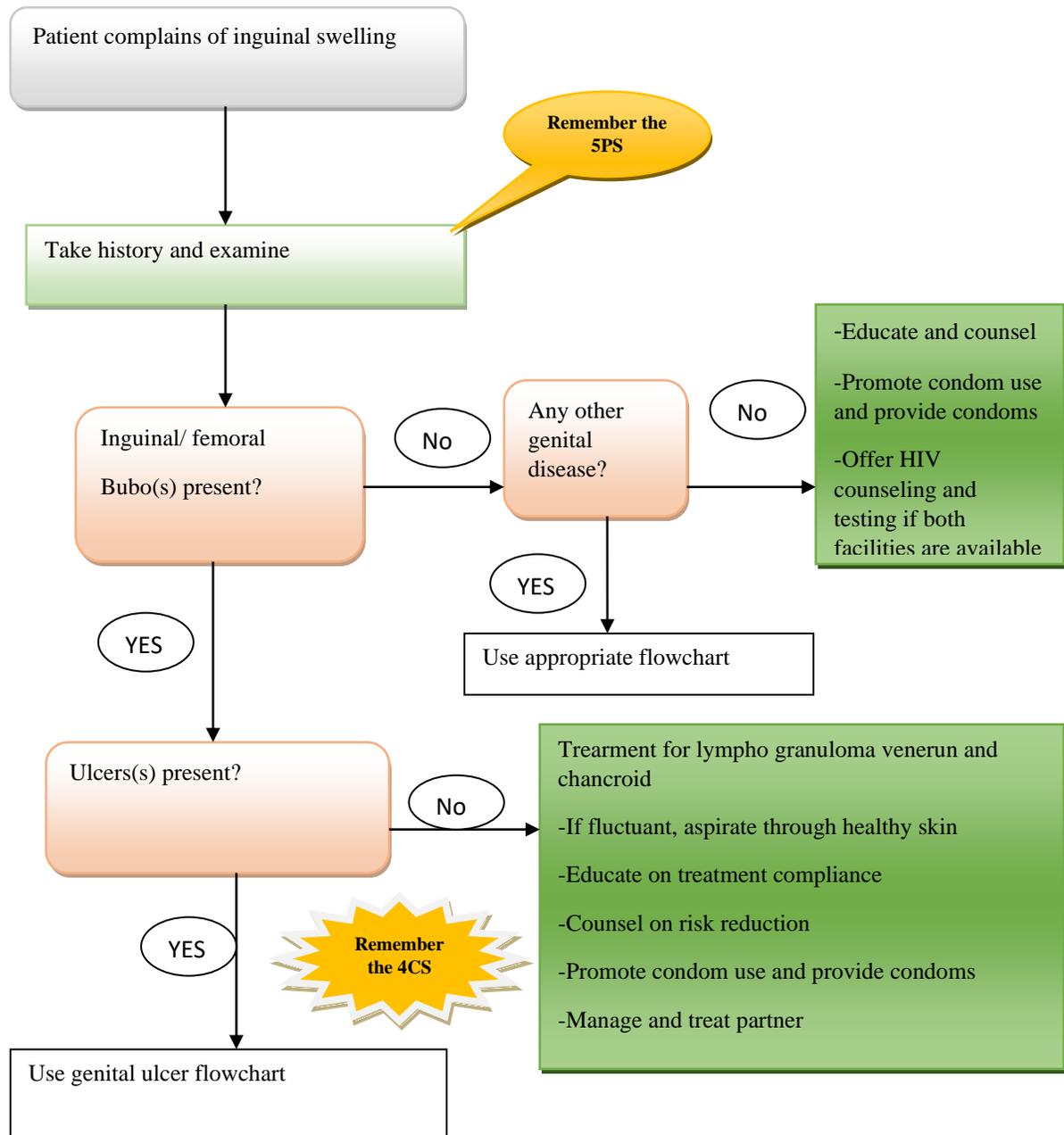


Table20. Treatment options for Inguinal Bubo(LVD)

<p>The recommended medical treatment for LGV involves one of the following antibiotic regimens:</p>	<p>Partners who have had contact with the patient within the past 60 days should be evaluated and treated</p> <ul style="list-style-type: none">• if symptomatic• If no symptoms are present, they should be treated for exposure as follows
<p>A- Doxycycline 100mg 2 times for 14 or 21 days B- Erythromycin base 500mg 3 times for 14 or 21 days</p>	<ul style="list-style-type: none">• Doxycycline 100mg 2 times for 7 day• Azithromycin 1gm as a single dose

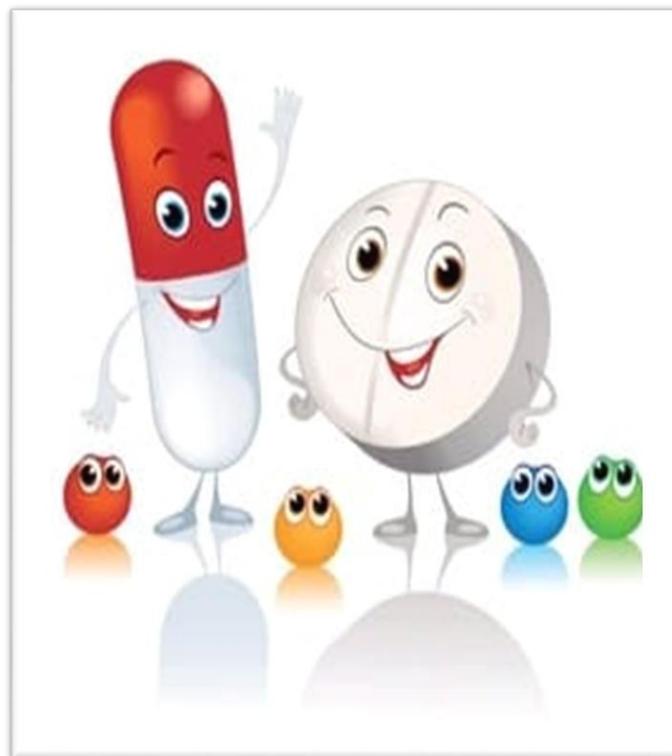
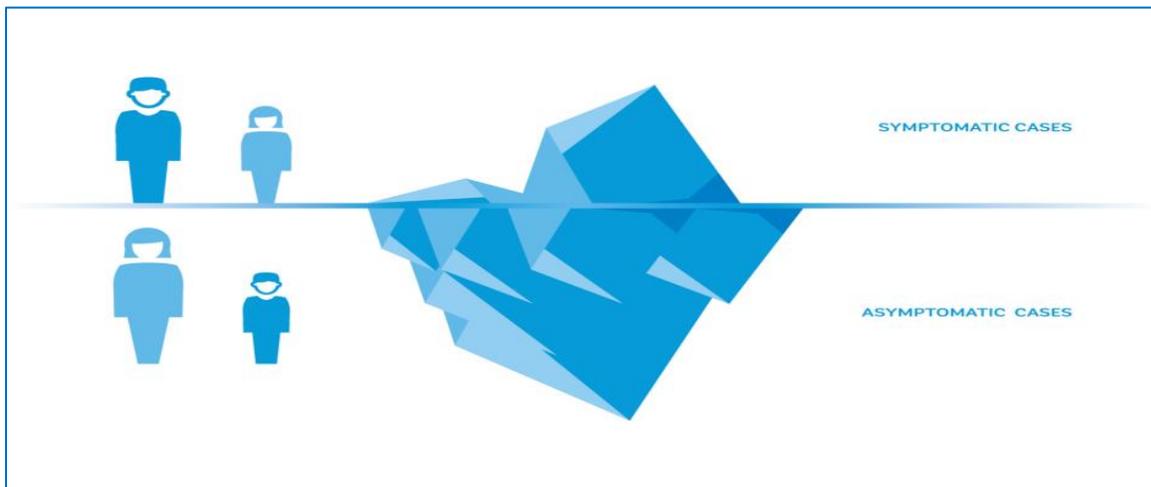
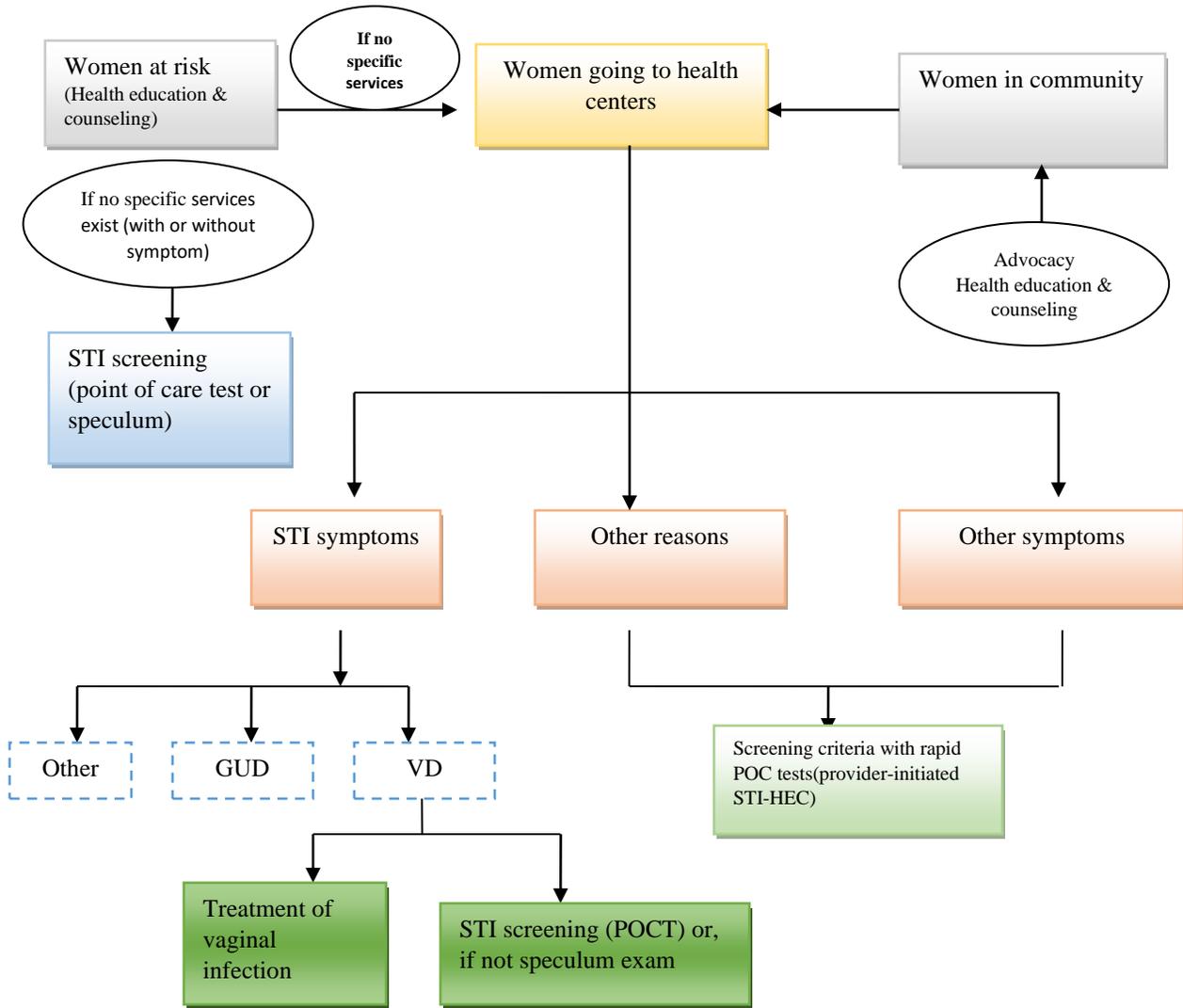
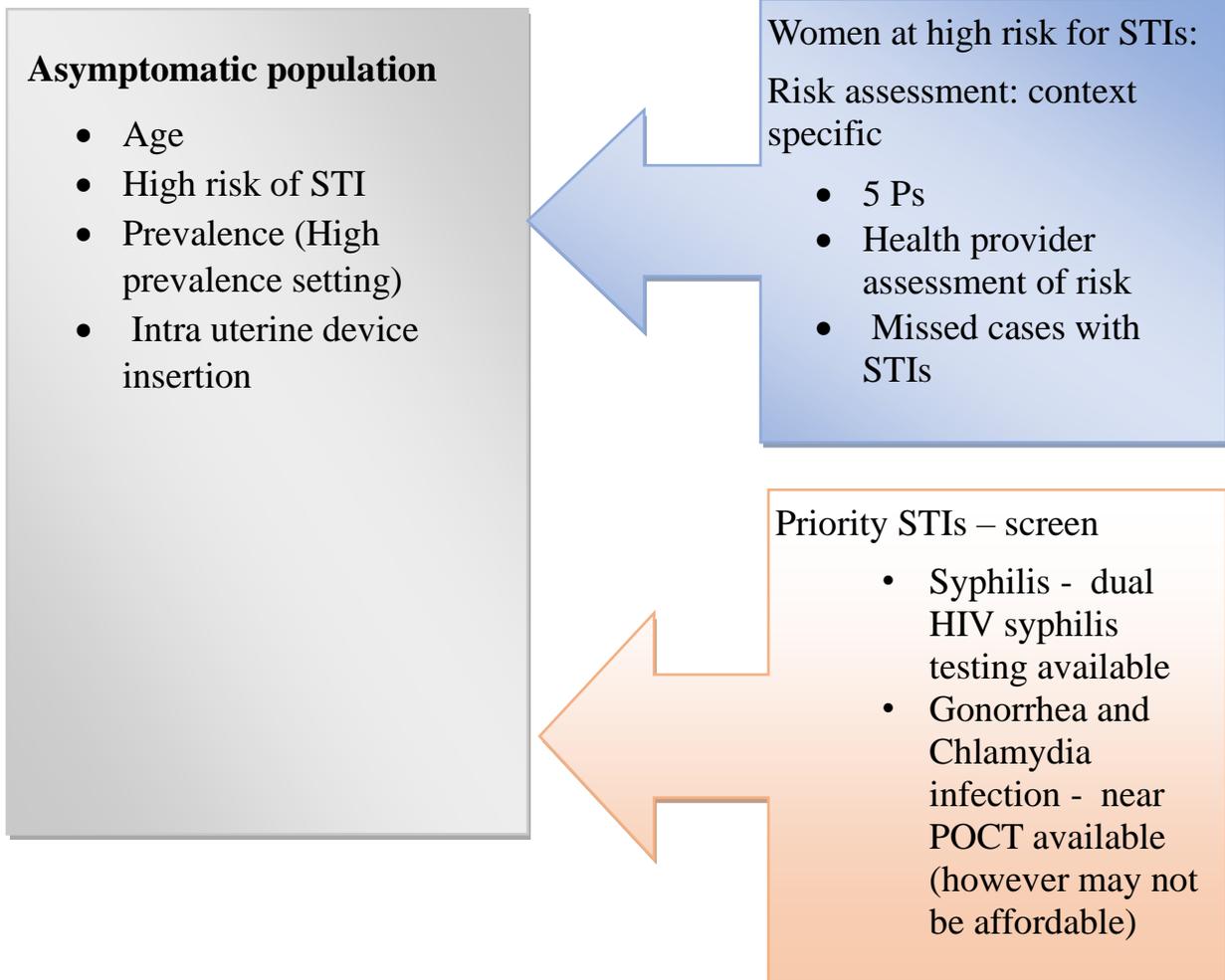


Figure 10: STI case management: asymptomatic STIs



Screening criteria for the use of NAAT or rapid POCT



References:

- 1- World Health Organization Guidelines on the Management of Symptomatic Sexually Transmitted Infection. Geneva. World Health Organization. 2021. on press.
- 2- Iraqi National Guideline for the Management of Sexually Transmitted Infections, 2007.
- 3- Workowski KA, Bolan GA. Sexually transmitted diseases treatment guidelines, 2015. MMWR. Recommendations and reports: Morbidity and mortality weekly report. Recommendations and reports. 2015 Jun 5;64(RR-03):1
- 4- Soni S, Horner P, Rayment M, Pinto-Sander N, Naous N, Parkhouse A, Bancroft D, Patterson C, Fifer H. British Association for Sexual Health and HIV national guideline for the management of infection with Mycoplasma genitalium (2018). International journal of STD & AIDS. 2019 Sep;30(10):938-50.
- 5- MacDonald N, Wong T. Canadian guidelines on sexually transmitted infections, 2006. Cmaj. 2007 Jan 16;176(2):175-6.
- 6- Soliman C, Botors A. Egyptian National Guideline for the Management of Sexually Transmitted Infections, 2006.
- 7- Sexually transmitted diseases: policies and principles for prevention and care WHO/UNAIDS.
- 8- <https://emedicine.medscape.com/article/1192190-workup>
- 9- https://www.uptodate.com/contents/search?search=vaginal%20discharge&sp=0&searchType=PLAIN_TEXT&source=USER_INPUT&searchControl=TOP_PULLDOWN&searchOffset=1&autoComplete=true&language=&max=0&index=2~6&autoCompleteTerm=vaginal%20

STI Guideline/ National AIDS Center / Iraq

2021