Sexually Transmitted Infections

MANAGEMENT GUIDELINES 2015

Adapted from: Standard Treatment Guidelines and Essential Drugs List PHC





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Sexually Transmitted Infections Diagnosis and Management

The syndromic approach to Sexually Transmitted Infection (STI) diagnosis and management is to treat the signs or symptoms (syndrome) of a group of diseases rather than treating a specific disease. This allows for the treatment of one or more conditions that often occur at the same time and has been accepted as the management of choice. This guide includes the current STI syndromic management algorithms.

STIs are preventable and many are treatable. Early access to care helps prevent further transmission to partners and from mother-to-child,

STI screening should include the following three questions of all persons aged 15-49 years, regardless of clinical presentation:

- Do you have any genital discharge?
- Do you have any genital ulcers?
- Has/have your partner(s) been treated for an STI in the last 8 weeks?

acquisition of additional STIs, and decreases the risk of STI related complications. Screening for STIs at any and all health care visits, can promote STI prevention and management and provide an opportunity for additional health promotion and education. Where possible, STI screening and prevention should become routine and integrated into all health visits.

In order to perform a proper clinical assessment it is important to take a good sexual history and undertake a thorough ano-genital examination. The history should include questions concerning symptoms, recent sexual history, sexual orientation, type of sexual activity (oral, vaginal, anal sex), the possibility of pregnancy (females), use of contraceptives including condoms, recent antibiotic history,

Promote HIV counselling and testing.

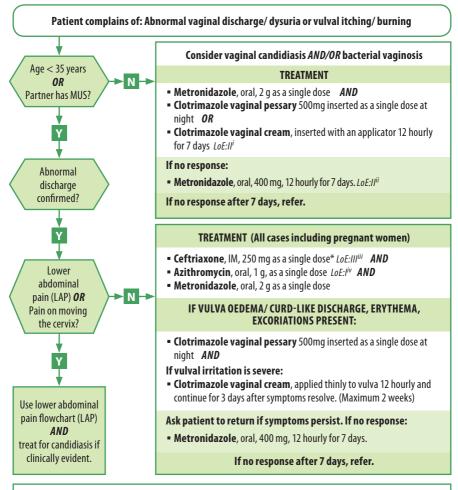
Suspected STIs in children should be referred to the hospital for further management.

any drug allergies, and recent overseas travel.

General Measures

- Counselling and education, including HIV testing
- Condom promotion, provision and demonstration to reduce the risk of STIs
- Compliance/adherence with treatment
- Contact treatment/partner management
- Circumcision promotion with appropriate counselling concerning condoms
- Contraception and conception counselling

Vaginal Discharge Syndrome (VDS)



*People who are allergic to penicillin may also react to ceftriaxone.

If severe penicillin allergy, i.e. angioedema, anaphylactic shock or bronchospasm, omit ceftriaxone and increase azithromycin dose to:

Azithromycin, oral, 2 g, as a single dose. LoE:1^v

For ceftriaxone IM injection: Dissolve ceftriaxone **250 mg** in 0.9 mL lidocaine 1% without epinephrine (adrenaline) *LoE:IIIV* Take Pap smear after treatment, if indicated according to screening guidelines.

Note: Suspected STI in children should be referred to hospital for further management.

Lower Abdominal Pain (LAP)

Sexually active patient complains of lower abdominal pain with/ without vaginal discharge Take history (including gynaecological) and examine (abdominal and vaginal). Emphasize HIV testing Any of the following present: Pregnancy Missed period Lower abdominal tenderness with/ Recent delivery, TOP or miscarriage without vaginal discharge Abdominal quarding and/or rebound Abdominal vaginal bleeding Urinalysis results or symptoms consistent with UTI Abdominal mass **AND** absence of cervical motion tenderness ■ Fever > 38° C TREATMENT Refer all patients for gynaecological or Treat as UTI surgical assessment. Ceftriaxone, IM, 250 mg single dose* SEVERELY ILL PATIENTS LoE:IIIⁱⁱⁱ AND **Azithromycin**, oral, 1 g as a single dose Set up an IV line and treat shock if present. LoF:IIVII AND If referral is delayed > 6 hours: • Metronidazole, oral, 400 mg 12 hourly - Ceftriaxone, IV, 1g (Do not dilute with for 7 days LoE:IIIviii lidocaine 1%) AND • Metronidazole, oral, 400 mg Pain not improving after 48–72 hours: refer urgently for gynaecological assessment For pain, add:* **Ibuprofen**, oral 400 mg 8 hourly with food LoE:/// Discharge patient Improved after 7 days Refer

*If severe penicillin allergy, i.e. angioedema, anaphylactic shock or bronchospasm, omit ceftriaxone and increase azithromycin dose to: Azithromycin, oral, 2 g as a single dose. LoE:IV

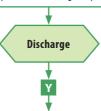
For ceftriaxone IM injection: Dissolve ceftriaxone 250 mg in 0.9 mL lidocaine 1% without epinephrine (adrenaline). LoE:IIIVII

7

Male Urethritis Syndrome (MUS)

Patient complains of urethral discharge or dysuria

Take history, including sexual orientation and examine. If no visible discharge; ask patient to milk urethra. Emphasise HIV testing and partner(s) tracing.



TREATMENT

- **Ceftriaxone**, IM, 250 mg single dose* *LoE:IIIⁱⁱ AND*
- Azithromycin, oral, 1 g as a single dose LoE:I^{iv}

If sexual partner has VDS, add:

Metronidazole, oral, 2 g as a single dose

Urethral discharge persists after 7 days

Suspected ceftriaxone 250 mg treatment failure:

- Ceftriaxone, IM, 1 g single dose ** LoE:III^{ix} AND
- Azithromycin, oral, 2 g as a single dose AND
- Metronidazole, oral, 2 g as a single dose, if not already given

Refer all **ceftriaxone treatment failures** within 7 days for **gentamicin**, IM, 240 mg as a single dose. *LoE:III^{ix, x}*

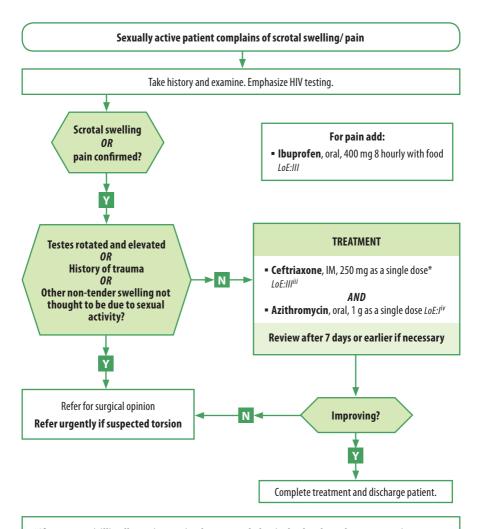
If severe penicillin allergy, i.e. angioedema, anaphylactic shock or bronchospasm:

*omit **ceftriaxone**, IM, 250 mg and increase azithromycin dose to azithromycin, oral, 2 g as a single dose *LoE:IV***omit **ceftriaxone**, IM, 1 g and refer to a centre for gentamicin, IM, 240 mg as a single dose plus azithromycin, oral, 2 g as a single dose. *LoE:IIIII*, x

For ceftriaxone IM injection:

- Dissolve **ceftriaxone 250 mg** in 0.9 mL lidocaine 1% without epinephrine (adrenaline).
- Dissolve **ceftriaxone 1 g** in 3.6 mL lidocaine 1% without epinephrine (adrenaline). *LoE:IIIV*

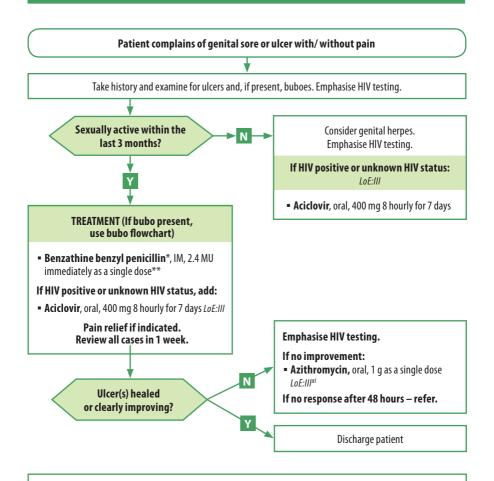
Scrotal Swelling (SSW)



- *If severe penicillin allergy, i.e. angioedema, anaphylactic shock or bronchospasm, omit ceftriaxone and increase azithromycin dose to:
- Azithromycin, oral, 2 g as a single dose LoE:1, III^v

For ceftriaxone IM injection: dissolve ceftriaxone **250 mg** in 0.9 mL lidocaine 1% without epinephrine (adrenaline). *LoE:IIIV*ⁱ

Genital Ulcer Syndrome (GUS)

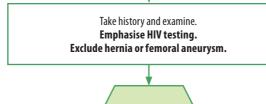


Penicillin allergic men and non-pregnant women: Perform a baseline RPR and replace benzathine penicillin with:

- **Doxycycline**, oral, 100 mg 12 hourly for 14 days.
- Patient to return for a follow-up RPR 6 months later. LoE:III
- *Penicillin allergic pregnant women/ breast feeding women, refer for confirmation of new syphilis infection and possible penicillin desensitisation. $LoE:IIP^{til}$
- **For benzathine benzylpenicillin, IM, 2.4 MU: Dissolve benzathine benzylpenicillin **2.4 MU** in 6 mL lidocaine 1% without epinephrine (adrenaline). LoE:III^{piii}

Bubo





Bubo confirmed?

TREATMENT

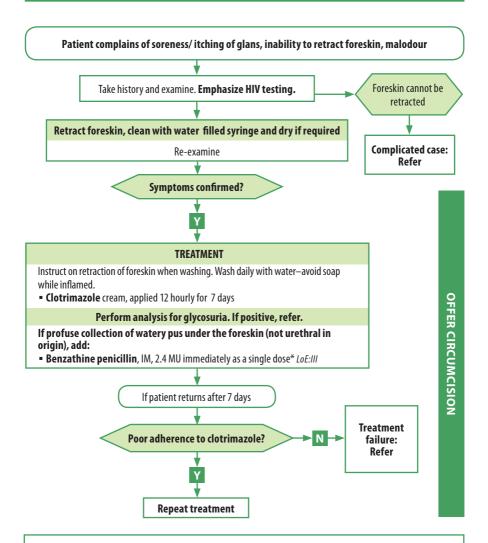
 Azithromycin, oral, 1 g immediately and 1 g a week later LoE:III^{xiv}

If bubo is fluctuant:

Aspirate pus in sterile manner. Repeat every 72 hours, as necessary.

If no improvement after 14 days, refer.

Balanitis/Balanoposthitis (BAL)



*Penicillin allergic men:

• Replace benzathine penicillin with: **Doxycycline**, oral, 100 mg 12 hourly for 14 days.

For benzathine benzylpenicillin, IM, 2.4 MU: Dissolve benzathine benzylpenicillin **2.4 MU** in 6 mL lidocaine 1% without epinephrine (adrenaline). *LoE:IIIP^{eliii}*

Syphilis Serology and Treatment

Syphilis Serology

The Rapid Plasmin Reagin (RPR) measures disease activity, but is not specific for syphilis. False RPR positive reactions may occur, notably in patients with connective tissue disorders (false positive reactions are usually low titre < 1:8). For this reason, positive RPR results should be confirmed as due to syphilis by further testing of the serum with a specific treponemal test, e.g.:

- Treponema pallidum haemagglutination (TPHA) assay.
- Treponema pallidum particle agglutination (TPPA) assay.
- Fluorescent Treponemal Antibody (FTA) assay.
- Treponema pallidum ELISA.
- Rapid treponemal antibody test.

Screening can also be done the other way around starting with a specific treponemal test followed by a RPR in patients who have a positive specific treponemal test. This is sometimes referred to as the "reverse algorithm".

Once positive, specific treponemal tests generally remain positive for life.

The RPR can be used:

- To determine if the patient's syphilis disease is active or not,
- To measure a successful response to therapy (at least a fourfold reduction in titre, e.g. 1:256 improving to 1:64), or
- To determine a new re-infection.

Some patients, even with successful treatment for syphilis, may retain life-long positive RPR results at low titres (≤1:8), which do not change by more than one dilution difference (up or down) over time (so-called serofast patients).

Note:

- Up to 30% of primary syphilis cases, i.e. those with genital ulcers may have a negative RPR.
- The RPR is always positive in the secondary syphilis stage and remains high during the first two (infectious) years of syphilis.

Medicine Treatment

Early Syphilis Treatment

Check if treated at initial visit.

- Benzathine benzylpenicillin, IM, 2.4 MU immediately as a single dose.
 - Dissolve benzathine benzylpenicillin, IM, 2.4 MU in 6 mL lidocaine 1% without epinephrine (adrenaline).

In penicillin-allergic patients:

Doxycycline, oral, 100 mg twice daily for 14 days.

If penicillin-allergic and pregnant: Refer for penicillin desensitisation.

Late Syphilis Treatment

Check if treatment was commenced at initial visit.

- Benzathine benzylpenicillin, IM, 2.4 MU once weekly for 3 weeks.
 - Dissolve benzathine benzylpenicillin, IM, 2.4 MU in 6 mL lidocaine 1% without epinephrine (adrenaline).

If penicillin-allergic and pregnant: Refer for penicillin desensitisation.

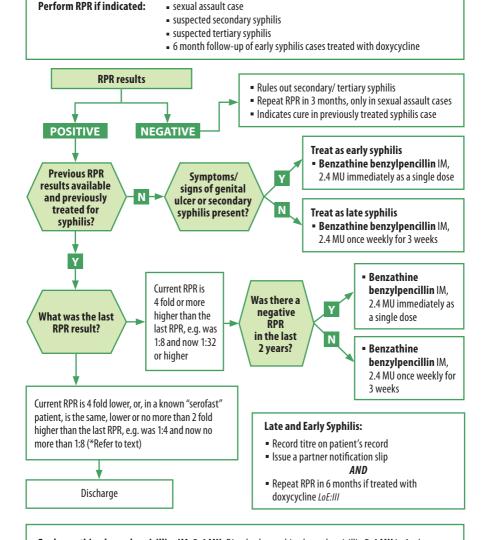
Syphilis in Pregnancy

Mother-to-child transmission of syphilis occurs in up to 40% of cases in untreated mothers. Untreated maternal syphilis may lead to miscarriage, stillbirth, non-immune hydrops fetalis, or congenital syphilis in the newborn. Syphilis may be asymptomatic in pregnant women with diagnosis made by positive serology, preferably with on-site rapid testing.

Referral

- Neurosyphilis.
- Clinical congenital syphilis.

Syphilis



For benzathine benzylpenicillin, IM, 2.4 MU: Dissolve benzathine benzylpenicillin 2.4 MU in 6 mL lidocaine 1% without epinephrine (adrenaline). LoE:IIII^{vii}

Syphilis in Pregnancy

All pregnant women at first antenatal visit and repeat testing at 32 weeks for women testing negative in the first trimester

Take history and examine, explain need for syphilis screening, do pre-test counselling for HIV

Take blood for RPR test (always), for HIV test (if consent), and for other ANC routines

Any STI syndrome or illness?



Use appropriate

appropriately

flowchart, manage

Treat pregnant woman with:

Benzathine benxylpenicillin
 2.4 MU imi once weekly for

3 weeks. Reconstitute with 6mL of lidocaine 1% without epinephrine (adrenaline)

Syphilis test

positive?

OR In case of penicillin allergy:

• Refer for penicillin desensitisation

HIV test positive?





Post test counselling, same day TB screen, HIV education, CD4 count, creatinine, clinical staging, support, and same day ART start Repeat HIV testing every 3 months throughout pregnancy, at labour/ delivery, at 6 week EPI visit, every 3 months throughout breastfeeding

Symptomatic newborns of mothers with positive syphilis test during pregnancy:

 Refer all symptomatic babies
 Notify: Notification of medical conditions, form GQ17/5 **Treat asymptomatic newborns** of mothers with positive syphilis test if mother was not treated, *OR* if mother received < 3 doses of benzathine benzylpenicillin, *OR* if mother delivers within 4 weeks of commencing treatment, with:

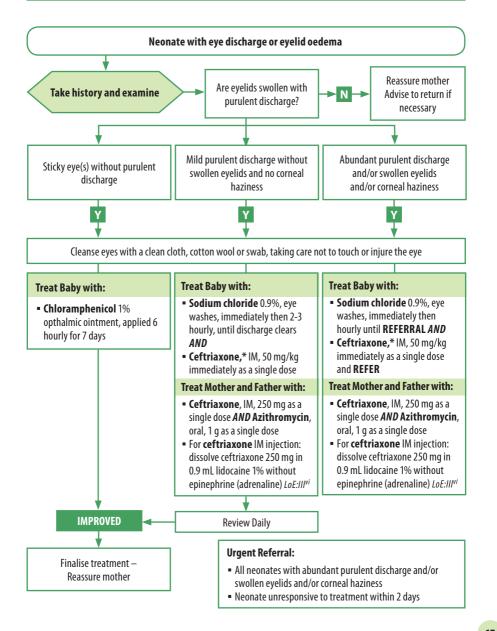
- Benzathine benzylpenicillin (depot formulation), IM, 50,000 units/kg as a single dose into lateral thigh*
- *Benzathine benzylpenicillin (depot formulation) must never be given IV

Follow up at 3 months after the last injection to confirm a fourfold (i.e. 2 dilution) reduction in RPR titres, provided the initial titre was > 1.8. If the initial titre was < 1.8, further reduction may not occur.

All pregnant women: Educate, ensure compliance and counsel; promote couple-counselling if applicable

- Explain the risk of vertical transmission
- Promote consistent condom use particularly during pregnancy, demonstrate condom use, provide condoms
- Stress the importance of partner treatment, issue one notification slip for each sexual partner
- Promote HIV counselling and testing of partner

Neonatal Conjunctivitis



Parents of baby with confirmed neonatal conjunctivitis:

- Educate, ensure compliance, and counsel; promote couple-counselling if applicable.
- Promote abstinence from penetrative sex during the course of treatment.
- Promote and demonstrate condom use, retain condoms.
- Stress the importance of partner treatment and issue one notification slip for each sexual partner. Follow up
 partner treatment during review visit.
- Promote HIV counselling and testing. For negative results repeat test after 3 months.

*Infant Dosing of Ceftriaxone

Weight kg	Dose	Use one of the following injections mixed with water for injection (WFI):		Age
	mg	250 mg/2 mL (250 mg diluted in 2 mL WFI)	500 mg/2 mL (500 mg diluted in 2 mL WFI)	months/years
>2–2.5 kg	100 mg	0.8 mL	0.4 mL	>34-36 weeks
>2.5-3.5 kg	150 mg	1.2 mL	0.6 mL	>36 weeks–1 month
>3.5-5.5 kg	200 mg	1.6 mL	0.8 mL	>1-3 months

LoE: III^v

CAUTION: Use of ceftriaxone in severely ill neonates and children

Ceftriaxone should be used in neonates that are seriously ill only, and must be given even if they are jaundiced. In infants < 28 days of age, ceftriaxone should not be administered if a calcium containing intravenous infusion e.g. Ringer-Lactate, is given or is expected to be given. After 28 days of age, ceftriaxone and calcium containing fluids may be given but only sequentially with the giving set flushed well between the two products if given IV.

Annotate the dosage and route of administration in the referral letter.

Treatment of More than One STI Syndrome

STI Syndromes	Treatment (new episode)
MUS + SSW	Treat according to SSW flow chart.
MUS + BAL	Treat according to MUS flow chart AND • Clotrimazole cream, 12 hourly for 7 days
MUS + GUS	 Ceftriaxone, IM, 250 mg immediately as a single dose** AND Azithromycin, oral, 1 g as a single dose AND Aciclovir, oral, 400 mg 8 hourly for 7 days*
VDS + LAP	Treat according to LAP flow chart AND Treat for candidiasis, if required (see VDS flow chart)
VDS + GUS	 Ceftriaxone, IM, 250 mg immediately as a single dose** AND Metronidazole, oral, 2 g immediately as a single dose AND Azithromycin, oral, 1 g as a single dose AND Aciclovir, oral, 400 mg 8 hourly for 7 days* AND Treat for candidiasis, if required (see VDS flow chart)
LAP+ GUS	 Ceftriaxone, IM, 250 mg immediately as a single dose** AND Metronidazole, oral, 400 mg 12 hourly for 7 days AND Aciclovir, oral, 400 mg 8 hourly for 7 days*.
SSW+ GUS	 Ceftriaxone, IM, 250 mg immediately as a single dose** AND Aciclovir, oral, 400 mg 8 hourly for 7 days*

^{*}Treat with aciclovir only if HIV status is positive or unknown.

 $Penicillin\,allergic\,pregnant\,or\,breast feeding\,women, refer\,for\,penicillin\,desensitisation.$

^{**}Penicillin allergic men and non-pregnant women avoid ceftriaxone and refer to relevant algorithms.

Genital Molluscum Contagiosum (MC)

Description

This is a viral infection which can be transmitted sexually and non-sexually. It is usually self-limiting but can be progressive in an advanced stage of immunodeficiency.

- Clinical signs include papules at the genitals or other parts of the body.
- The papules usually have a central dent (umbilicated papules).

Medicine Treatment

- Tincture of iodine BP.
 - Apply with an applicator to the core of the lesions.

Genital Warts (GW): Condylomata Accuminata

Description

The clinical signs include:

- Warts on the ano-genital areas, vagina, cervix, meatus or urethra.
- Warts can be soft or hard.

In most cases, warts resolve without treatment after 2 years in non-immunosuppressed patients.

General Measures

- If warts do not look typical or are fleshy or wet, perform an RPR/VDRL test to exclude secondary syphilis, which may present with similar lesions.
- Emphasise HIV testing.

Referral

All patients with:

- Warts > 10 mm
- Inaccessible warts, e.g. intra-vaginal or cervical warts
- Numerous warts

Pubic Lice (PL)

Description

Infestation of lice mostly confined to pubic and peri-anal areas, and occasionally involves eyelashes.

The bites cause intense itching, which often results in scratching with bacterial super-infection.

General Measures

Thoroughly wash clothing and bed linen that may have been contaminated by the patient in the 2 days prior to the start of treatment in hot water and then iron.

Medicine Treatment

- Benzyl benzoate 25%
 - Apply to affected area.
 - Leave on for 24 hours, then wash thoroughly.
 - Repeat in 7 days.

Pediculosis of the Eyelashes or Eyebrows

- · Petroleum jelly.
 - Apply to the eyelid margins (cover the eyelashes) daily for 10 days to smother lice and nits.
 - Do not apply to eyes.

Referral

All children with lice on pubic, perianal area and eyelashes to exclude sexual abuse.

Treatment Protocol for Asymptomatic Partner(s)

Female Patient	Male Partner	Male Patient	Female Partner	
VDS	MUS plus metronidazole 2 g stat	MUS	VDS	
LAP	MUS plus metronidazole 2 g stat	SSW	VDS	
GUS	GUS	GUS	GUS	
GW	GW if signs	GW	GW if signs	
PL	PL	PL	PL	
МС	MC if signs	МС	MC if signs	
RPR+	Benzathine Benzylpenicillin 2.4mu im stat in addition RPR test	RPR+	Benzathine Penicillin 2.4mu im stat in addition RPR test	
		BAL	Cotrimazole vaginal pessary 500mgs inserted stat 2	
In addition: treat any symptomatic STI		In addition: treat any symptomatic STI		

Footnotes

i: Criteria for STI therapy in VDS: Unpublished surveillance data for VDS at Alexander Health Centre, Gauteng (2007-2012) shared by NICD: Centre for STI and HIV.

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