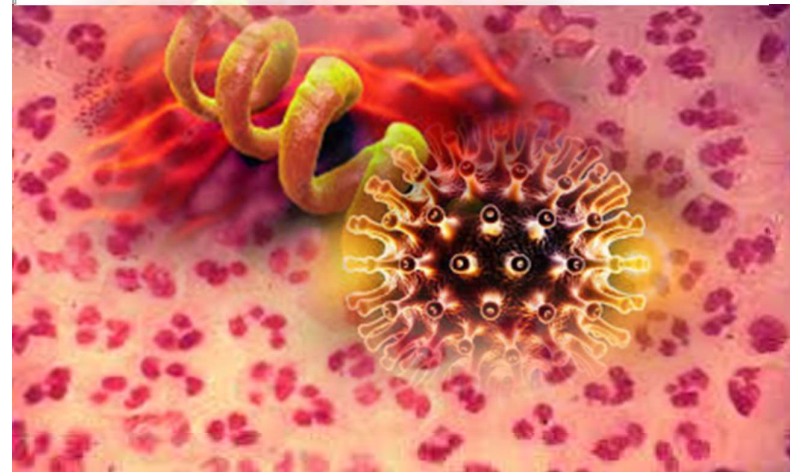


Management of Sexually Transmitted Infections

A quick reference guide for Primary Care



**Directorate General for Disease Surveillance &
Control and Directorate General Primary Health
Care**

Ministry of Health, Oman

**DIRECTORATE GENERAL FOR DISEASE SURVEILLANCE & CONTROL AND
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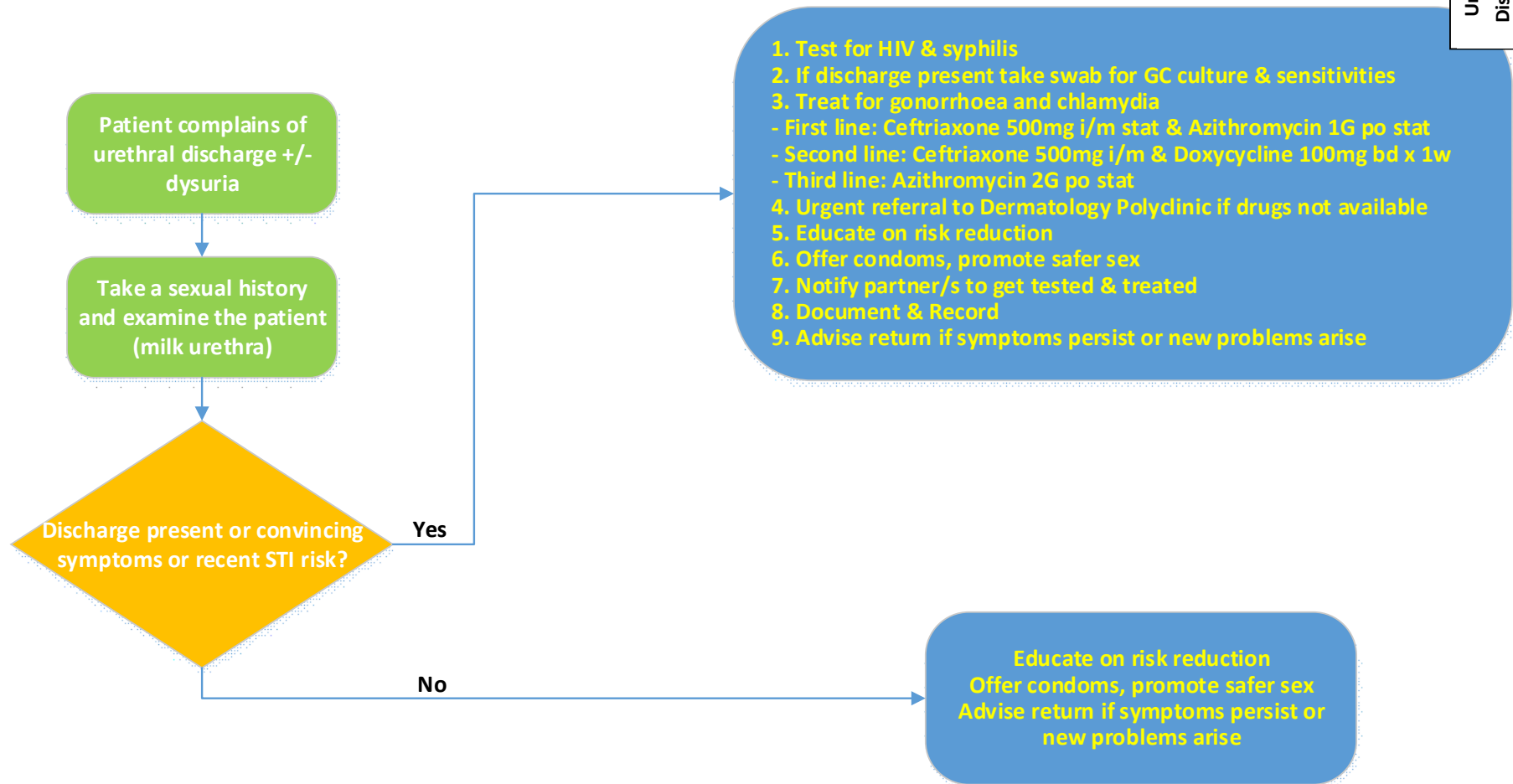
Director of Department of Communicable Diseases

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1. Urethral discharge in men (Code R36)



*Take a Sexual History to identify significant STI risk factors

Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW

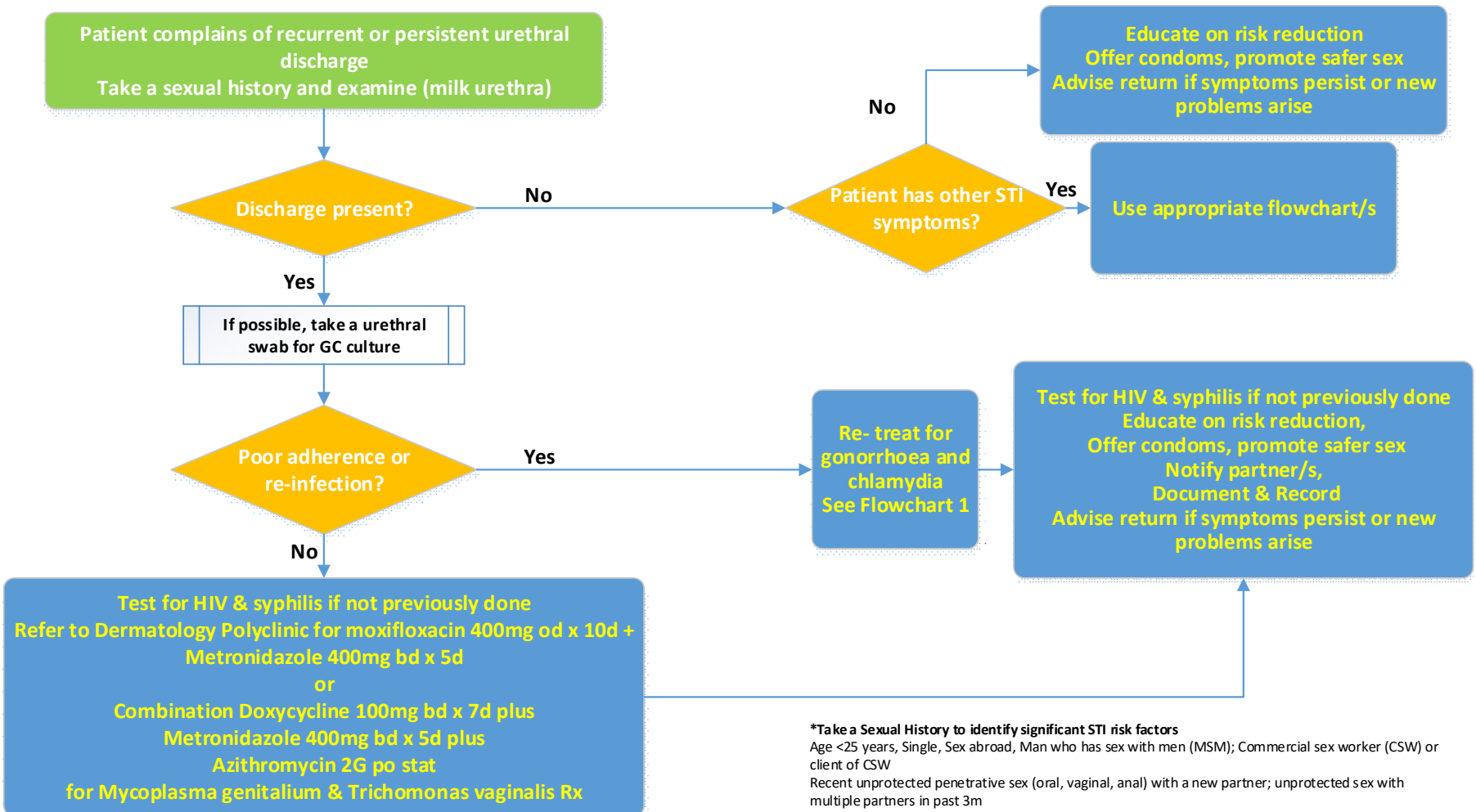
Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m

Patient has additional genitourinary symptoms or has a previous history of STI

Partner also has genitourinary symptoms or has a diagnosed STI

2. Recurrent or persistent urethral discharge in men (Code R36)

Persistent symptoms of discharge/dysuria for >2 weeks despite previous treatment



***Take a Sexual History to identify significant STI risk factors**

Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW

Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m

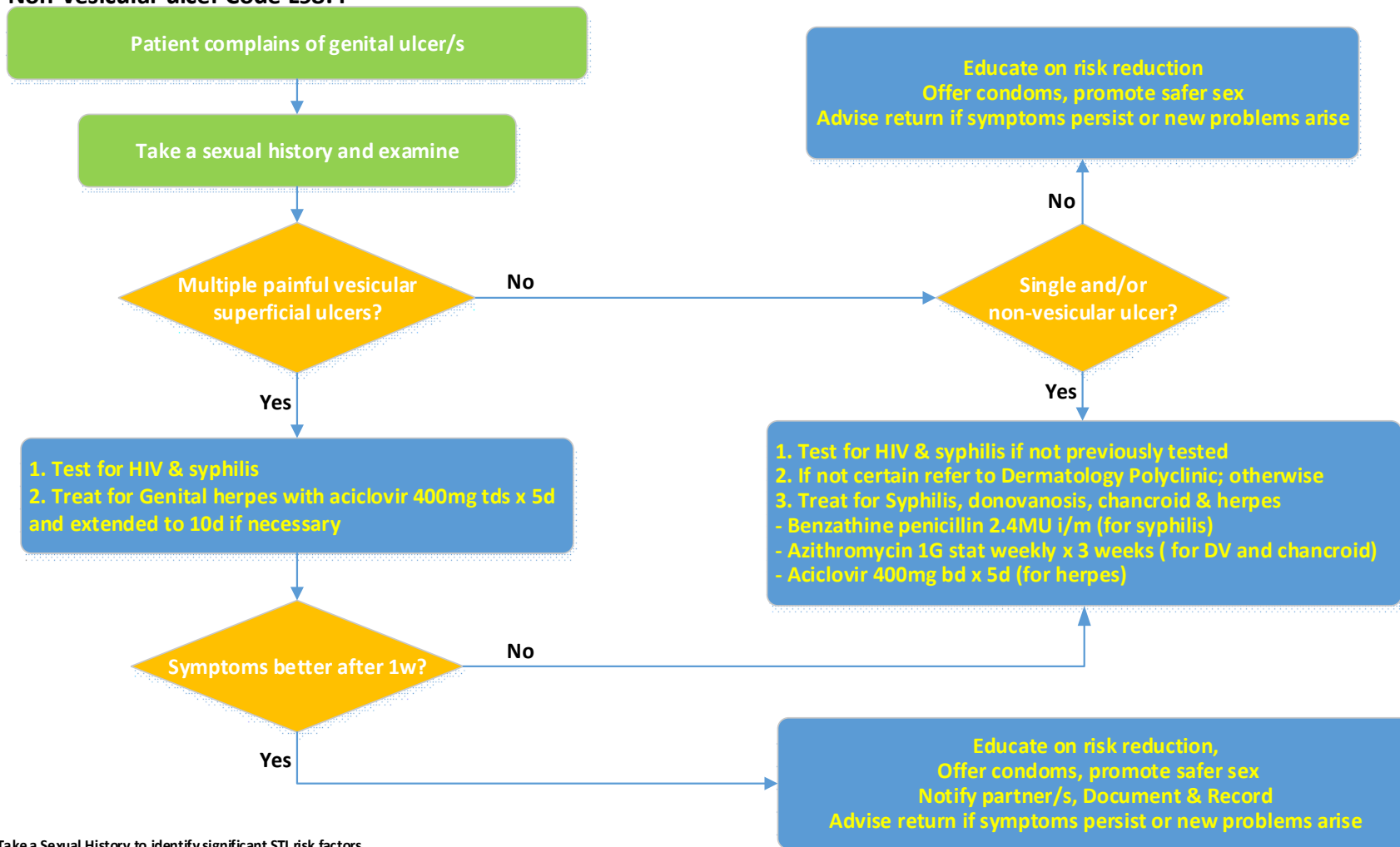
Patient has additional genitourinary symptoms or has a previous history of STI

Partner also has genitourinary symptoms or has a diagnosed STI

3. Acute genital ulceration

- Probable genital herpes Code A60.9

- Non-vesicular ulcer Code L98.4



***Take a Sexual History to identify significant STI risk factors**

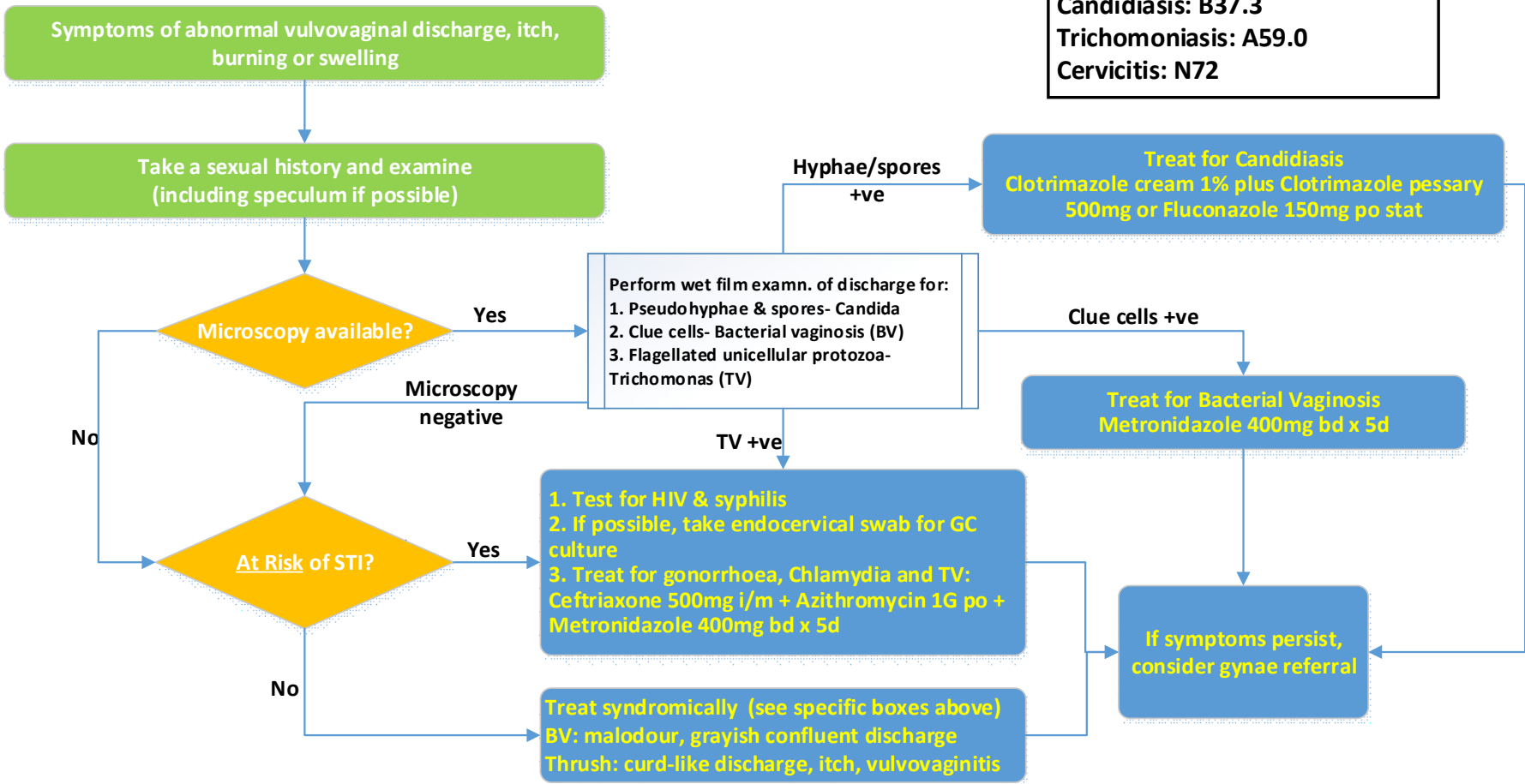
Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW

Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m

Patient has additional genitourinary symptoms or has a previous history of STI

Partner also has genitourinary symptoms or has a diagnosed STI

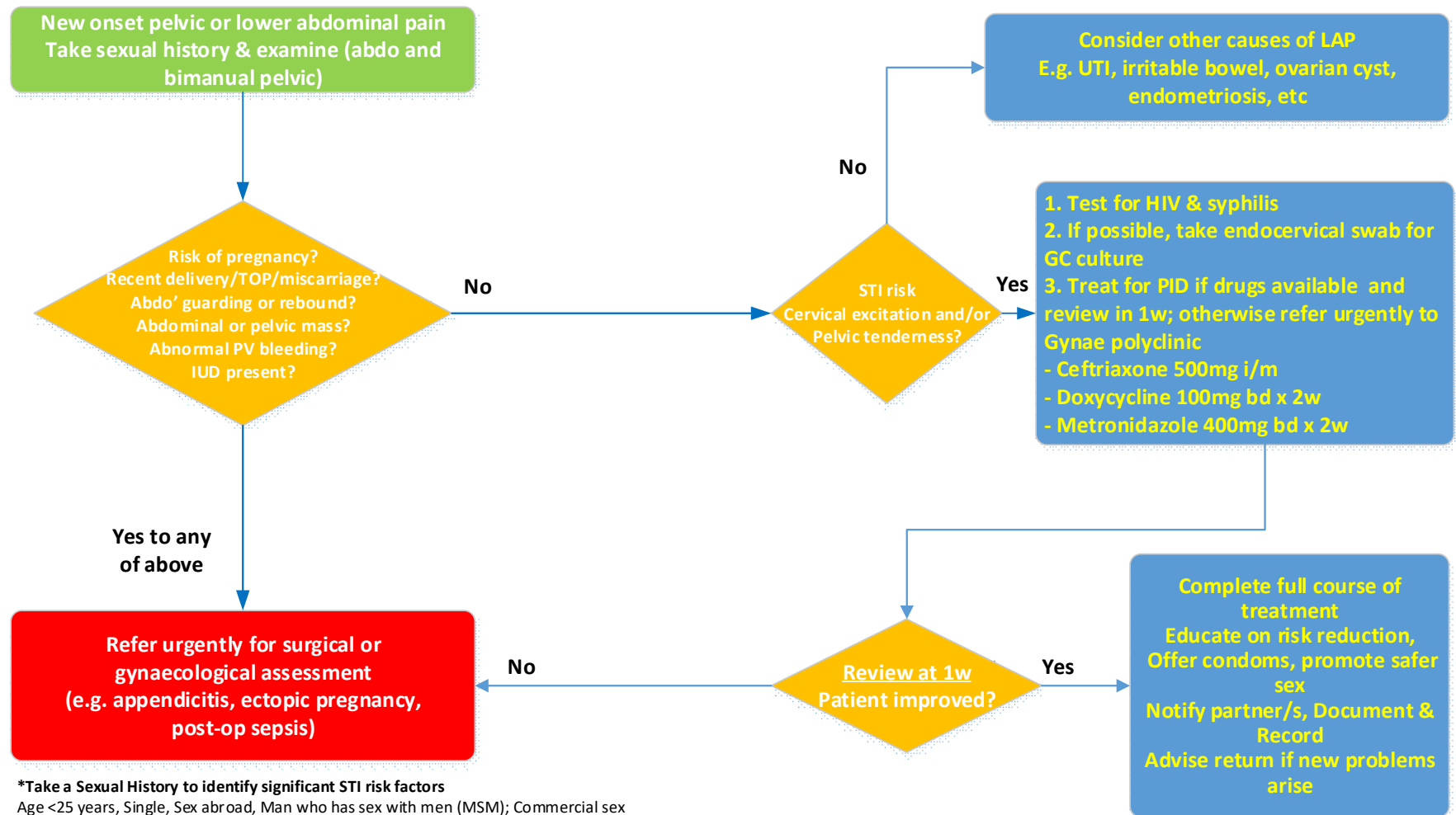
4. Vaginal discharge without lower abdominal pain



***Take a Sexual History to identify significant STI risk factors**

Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW
Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m
Patient has additional genitourinary symptoms or has a previous history of STI
Partner also has genitourinary symptoms or has a diagnosed STI

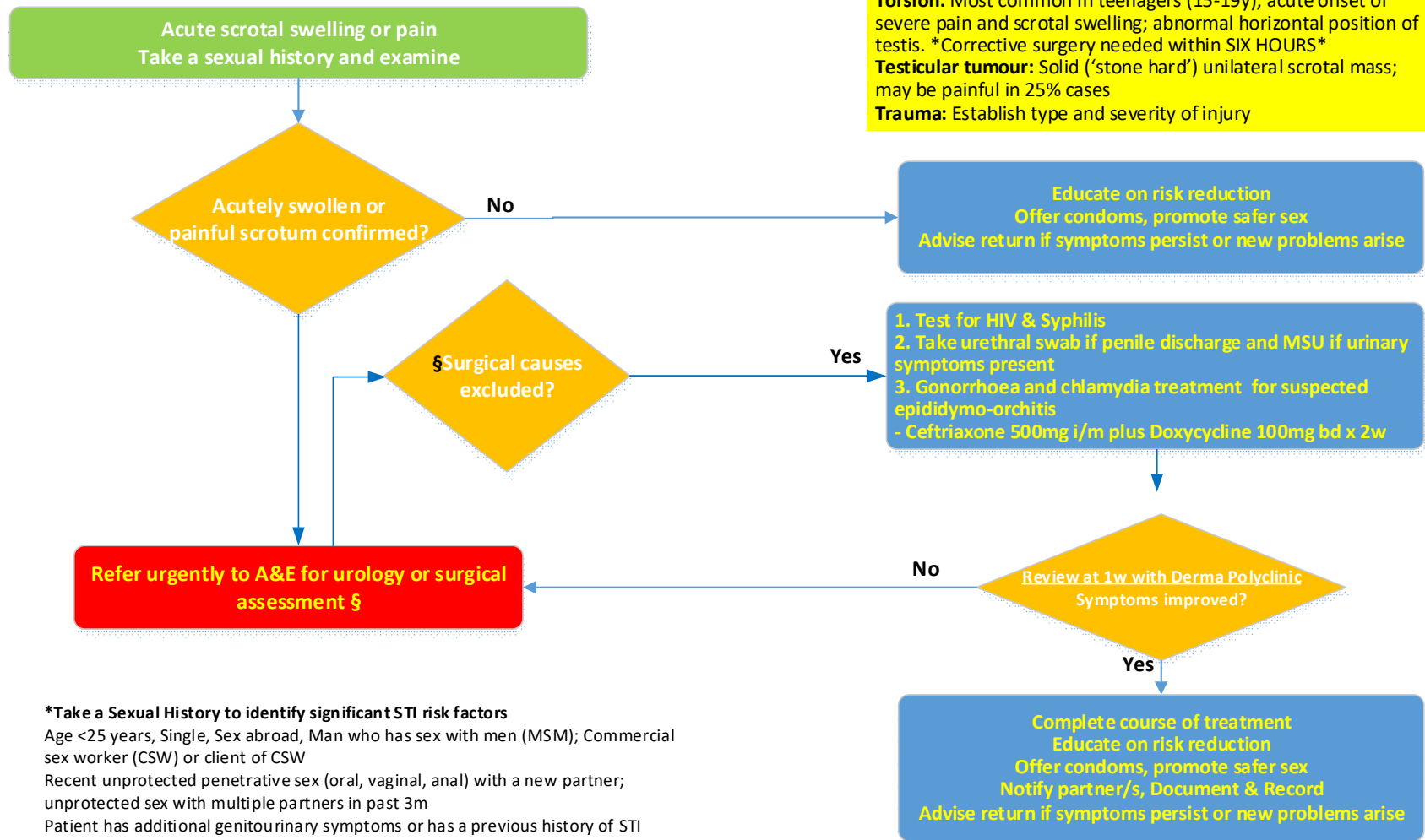
5. Pelvic/lower abdominal pain (LAP) in a woman (Pelvic Inflammatory Disease, Code N73.9)



*Take a Sexual History to identify significant STI risk factors

Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW
Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m
Patient has additional genitourinary symptoms or has a previous history of STI
Partner also has genitourinary symptoms or has a diagnosed STI

6. Acute scrotal swelling or pain (Code N49.2)



*Take a Sexual History to identify significant STI risk factors

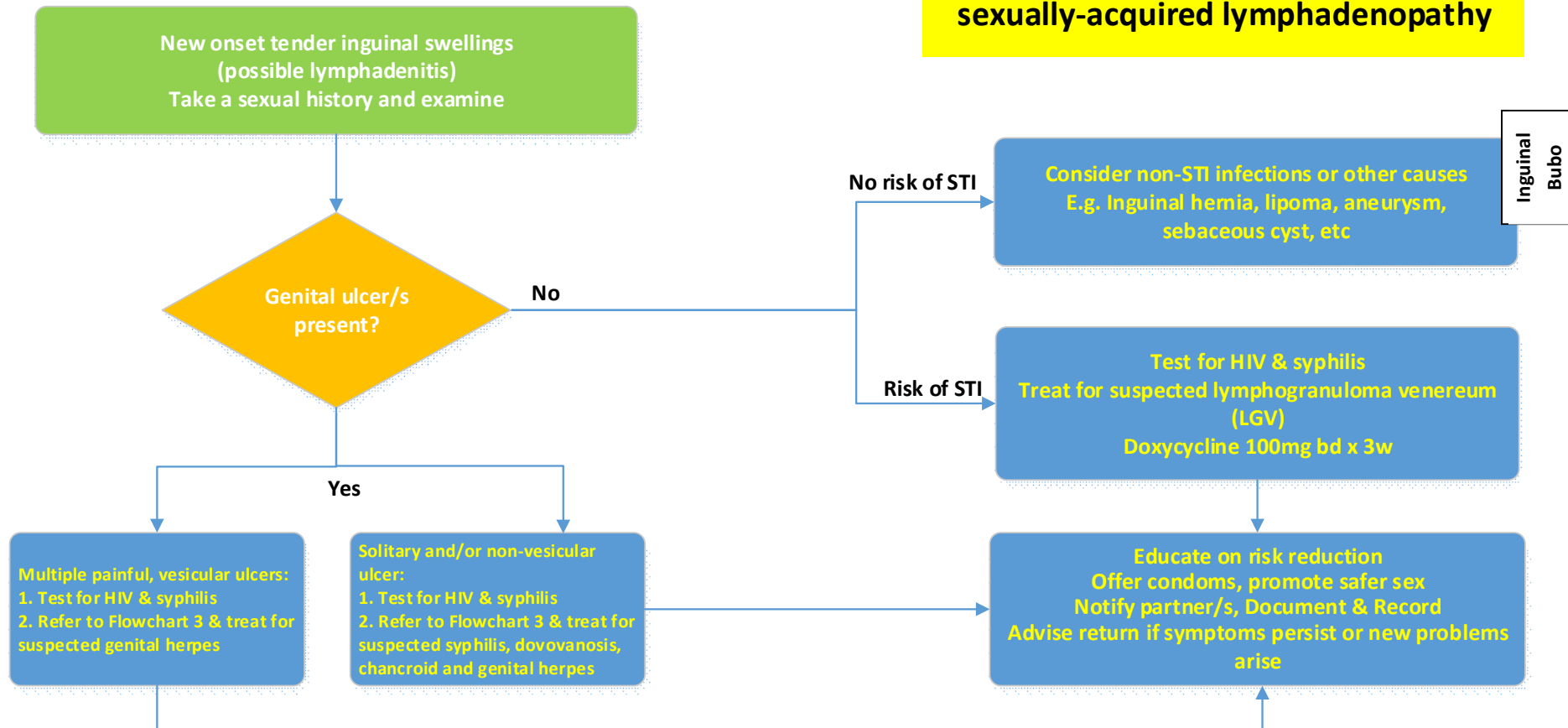
Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW

Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m

Patient has additional genitourinary symptoms or has a previous history of STI

Partner also has genitourinary symptoms or has a diagnosed STI

7. Inguinal lymphadenitis (Bubo) (Code I88.8)



***Take a Sexual History to identify significant STI risk factors**

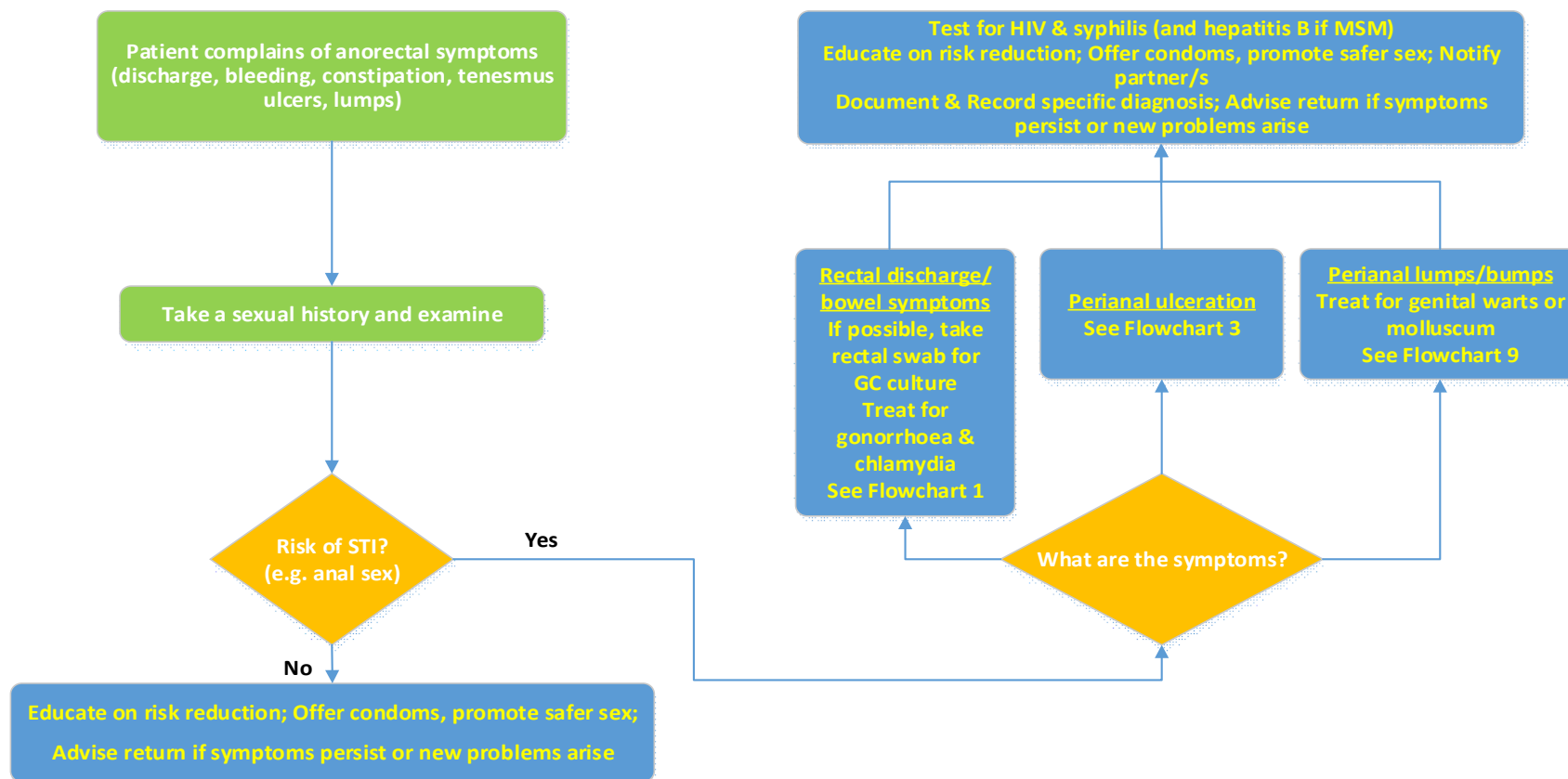
Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW

Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m

Patient has additional genitourinary symptoms or has a previous history of STI

Partner also has genitourinary symptoms or has a diagnosed STI

8. Anorectal symptoms (Code K62.9)



*Take a Sexual History to identify significant STI risk factors

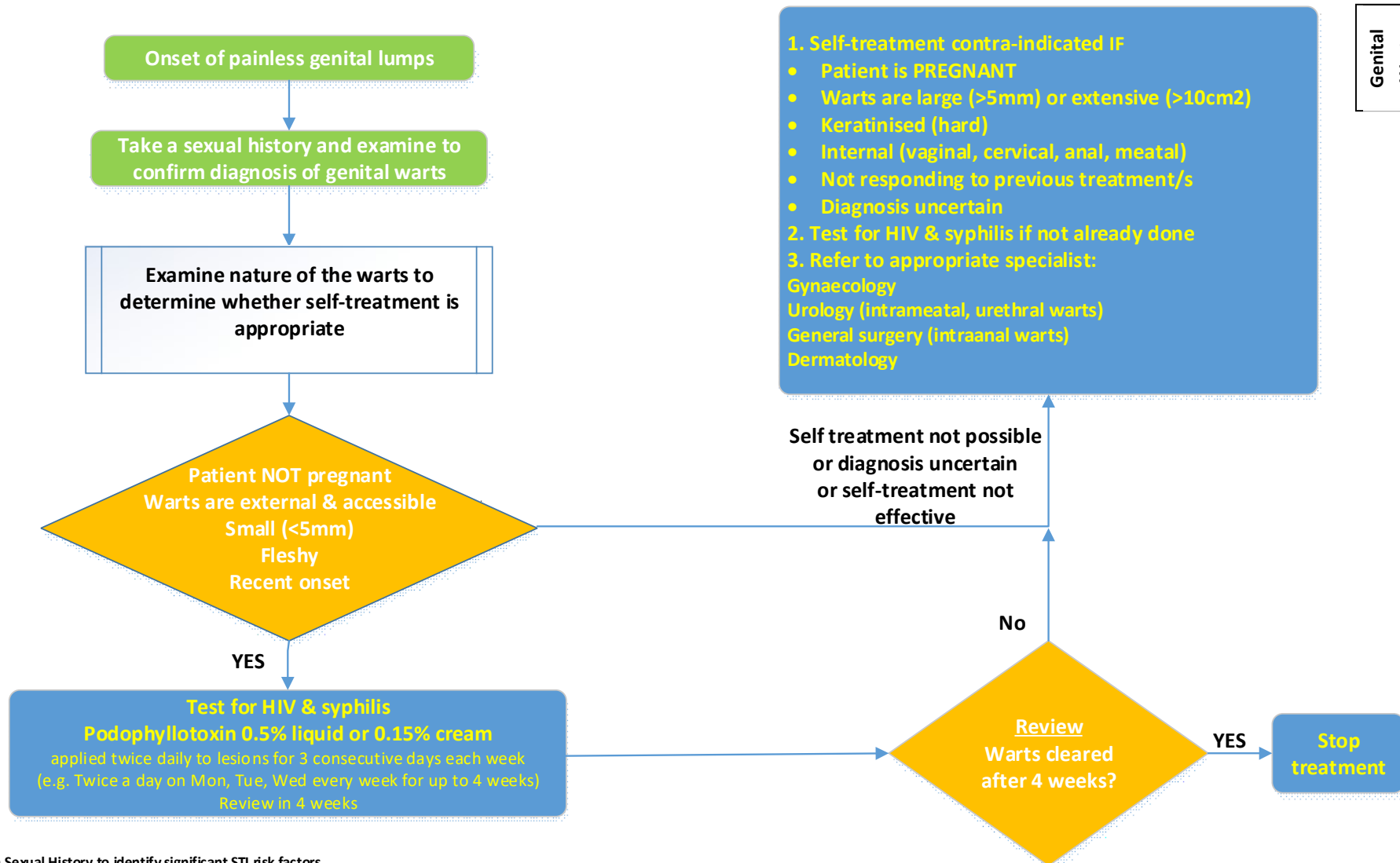
Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW

Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m

Patient has additional genitourinary symptoms or has a previous history of STI

Partner also has genitourinary symptoms or has a diagnosed STI

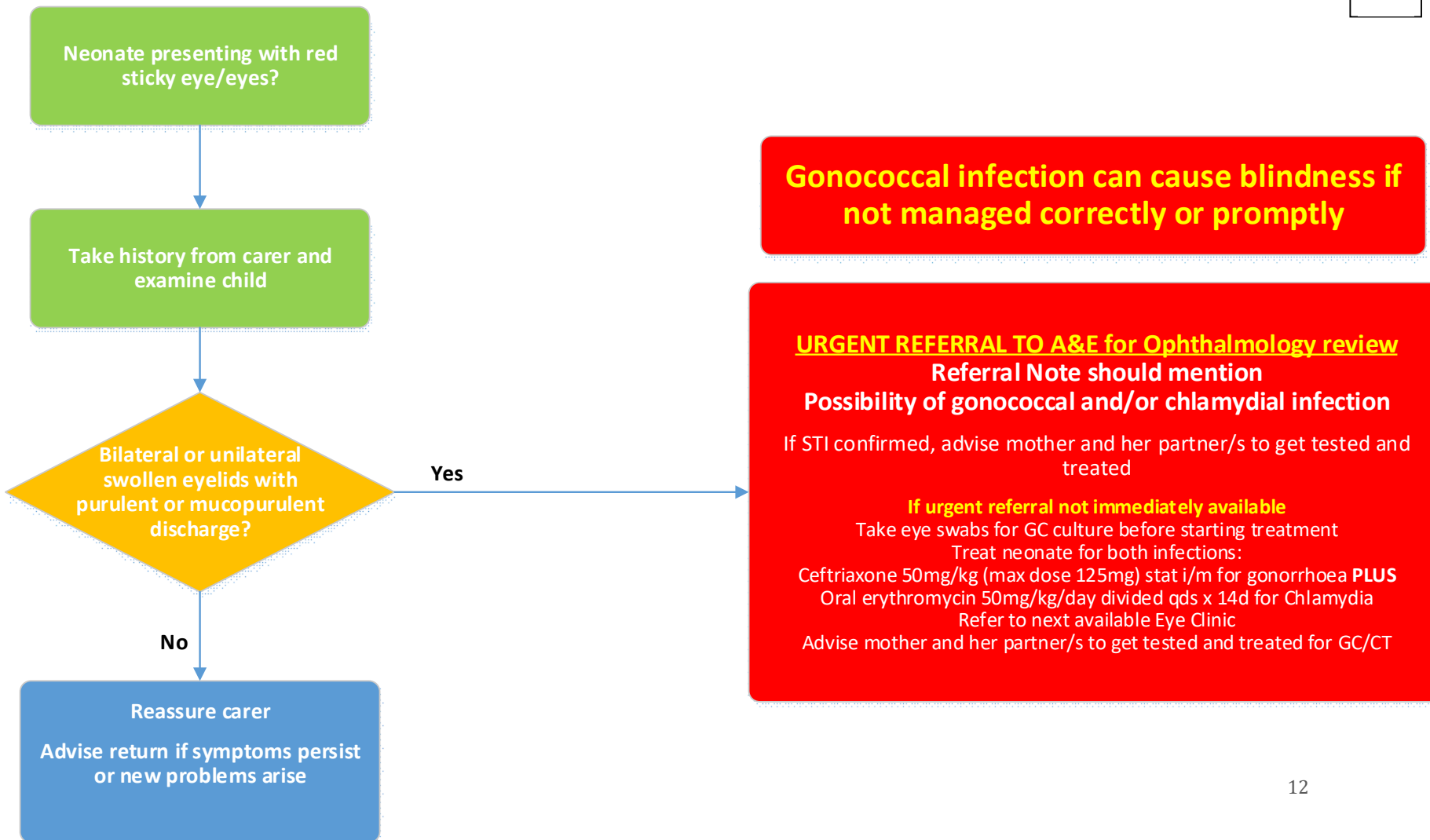
9. Genital warts (Code A63.0)



*Take a Sexual History to identify significant STI risk factors

Age <25 years, Single, Sex abroad, Man who has sex with men (MSM); Commercial sex worker (CSW) or client of CSW
Recent unprotected penetrative sex (oral, vaginal, anal) with a new partner; unprotected sex with multiple partners in past 3m
Patient has additional genitourinary symptoms or has a previous history of STI
Partner also has genitourinary symptoms or has a diagnosed STI

10. Neonatal conjunctivitis syndrome (Code P39.1)



11. Epidemiological treatment of sexual partners

Female patient:	Partner treatment: (and HIV & syphilis tests)
Vaginal discharge <ul style="list-style-type: none"> Low risk of STI? High risk of STI? 	<p>No treatment necessary (i.e. if treating a woman for BV or thrush)</p> <p>Ceftriaxone 500mg i/m & doxycycline 100mg bd x 7d & metronidazole 400mg bd x 5d</p>
Lower abdominal pain (PID)	Ceftriaxone 500mg i/m & doxycycline 100mg bd x 7d
Genital ulceration <ul style="list-style-type: none"> Probable herpes Other causes 	<p>If partner has ACTIVE herpes, aciclovir 400mg tds x 5d</p> <p>Benzathine penicillin 2.4MU i/m plus azithromycin 1G stat</p>
Genital warts	Treat if partner also has genital warts. See Flowchart 9.
Inguinal bubo (LGV)	Doxycycline 100mg tds x 3w

Male patient:	Partner treatment: (and HIV & syphilis tests)
Urethral discharge	Ceftriaxone 500mg i/m & azithromycin 1G stat
Scrotal pain (epididymo-orchitis)	Ceftriaxone 500mg i/m & azithromycin 1G stat
Genital ulceration <ul style="list-style-type: none"> Probable herpes Other causes 	<p>If partner has ACTIVE herpes, aciclovir 400mg tds x 5d</p> <p>Benzathine penicillin 2.4MU i/m plus azithromycin 1G stat</p>
Genital warts	Treat if partner also has genital warts (cryotherapy if pregnant). See Flowchart 9.
Inguinal bubo (LGV)	Doxycycline 100mg tds x 3w (azithromycin 1G weekly x 3w if partner is pregnant)

12. Management of maternal syphilis

Routine Antenatal Screening for ALL pregnant women at booking

- Check blood taken for HIV & syphilis serology
- Record test results in Green Card and Al Shifa (e.g. Reactive/ Non-reactive)
- **If initial blood test is syphilis EIA or RPR positive**
- Reflexively test sample for TPHA and RPR titre;
- If necessary, send blood sample to local lab for these tests

Action based on TPHA and RPR titre results:

If TPHA is positive...

- Make **urgent** eReferral to Obs & Gynae as 'walk-in' at secondary/tertiary hospital (preferably in same hospital as mother's planned delivery)
- Give patient a copy of the eReferral
- Document serological test results on Al-Shifa and mother's antenatal Green Card, e.g. TPHA Reactive or Non-reactive; RPR titre value
- Complete Part A of Form-Mother and send to Governorate Woman & Child Health Co-ordinator, Head of WCH (DG Health Affairs) and copy to Dept of Communicable Diseases

If TPHA is negative...

- And RPR titre <1:4, then likely to be a biological false positive.
- No further action required

LATE BOOKERS (booking after 20w gestation): Screen for HIV & syphilis at booking

UNBOOKED MOTHERS: Screen for HIV & syphilis on admission

N.B. RPR is the screening test in MOH facilities. VDRL and RPR titres are NOT interchangeable. Use only VDRL or only RPR when evaluating a patient's response to treatment

Assessment of maternal syphilis by Obstetric Team (TPHA: POSITIVE)

- Manage as HIGH RISK Pregnancy
- Take sexual history, identify STI risk factors
- Check for previous Hx of and Rx for syphilis
- Review obstetric history (e.g. stillbirths)
- Look for symptoms & signs of infection: chancre, rash, lymphadenopathy

If maternal syphilis treatment required:

- Complete Part B of Form-Mother and send to Governorate WCH Co-ordinator, Head of WCH (DG Health Affairs) and copy to Dept of Communicable Diseases
- Refer Husband for testing in Health Centre and advise no sexual contact until both parties treated

IF RPR titre \geq 1:8; TPHA positive, then code A51.9 (Early syphilis) on Al Shifa and treat:

- Benzathine penicillin 2.4 MU i/m x 1 dose if <28w gestation; or
- Benzathine penicillin 2.4 MU i/m x 2 doses one week apart if >28w gestation

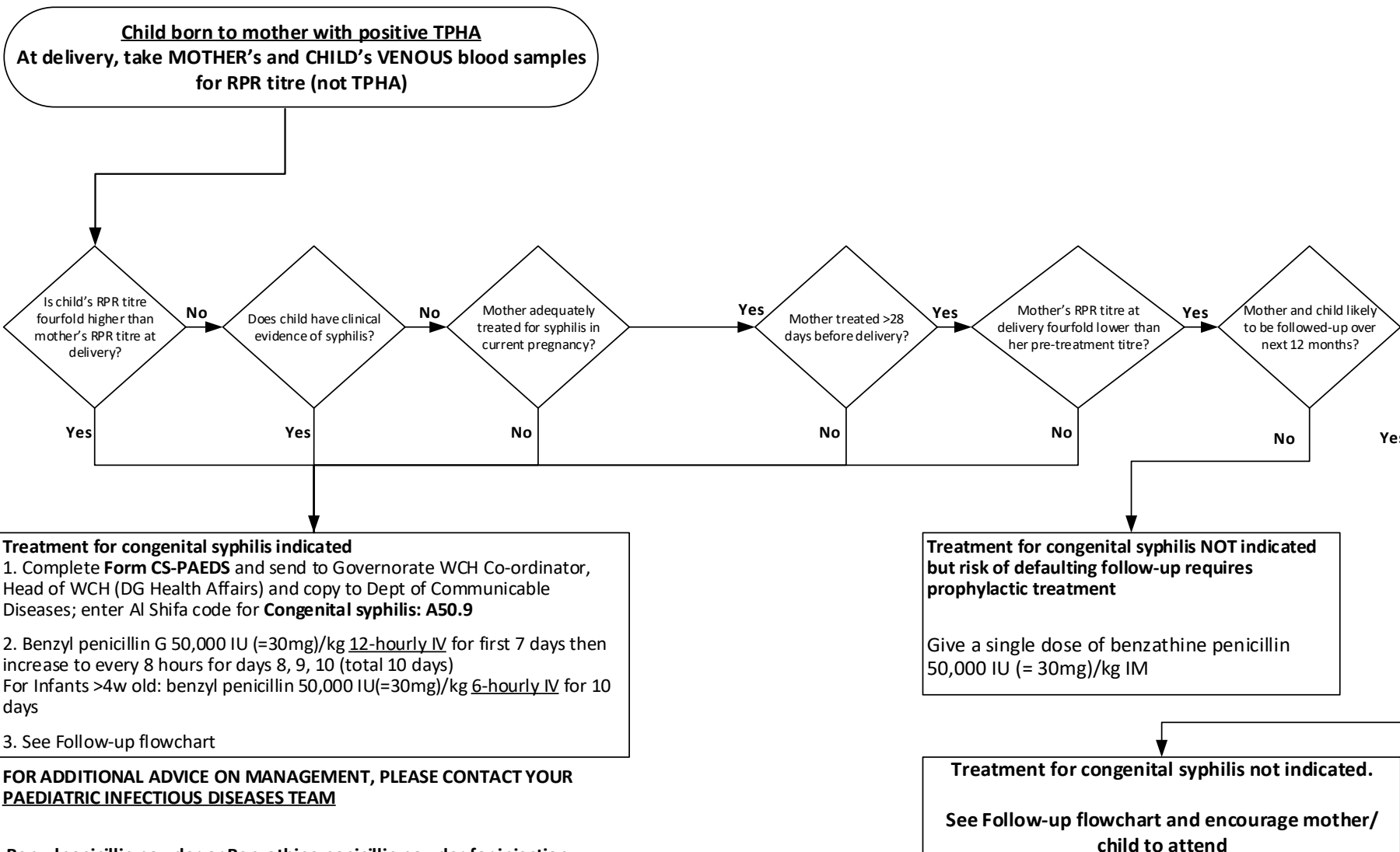
IF RPR \leq 1:4, TPHA positive, code A53.0 on Al Shifa. (Diagnosis covers late or indeterminate stage syphilis, previous Hx/Rx of syphilis with risk of re-infection; previous syphilis treatment not adequate or not documented):

- Benzathine penicillin 2.4 MU i/m weekly x 3 doses

Repeat maternal RPR titre at delivery to compare with baby's result.

See Notes if patient has penicillin allergy. Emphasise importance of completing treatments and refer to Paediatric team for post-natal assessment of child.

13. Management of congenital syphilis



Benzylpenicillin powder or Benzathine penicillin powder for injection
1 million IU = 600 mg
50,000 IU = 30 mg

14. Assessment of congenital syphilis

Assessment of child whose mother has reactive syphilis serology in pregnancy. Please document mother's syphilis serology results (RPR titre & TPHA) in Green Card and ensure that maternal RPR titre is repeated at delivery for comparison with infant's results.

A. Check for physical signs of congenital syphilis in the infant

Rash - vesicles or bullae may be present but usually maculo-papular, Copious nasal secretions • Haemorrhagic rhinitis (inflammation of the mucous membranes in the nasal passages) - symptoms include sneezing, nasal stuffiness, runny nose • Oedema • Hepatosplenomegaly • Thrombocytopenia • Haemolysis • Periostitis • Jaundice • Non-immune hydrops • Failure to move an extremity

B. Perform syphilis serology and additional microbiological tests (if available)

Neonatal serology (NOT cord blood): ask for RPR titre and TPHA. Send sample to CPHL or local reference lab.

If available: syphilis IgM EIA, dark-ground microscopy or PCR of skin lesions

C. Indications for further tests and treatment (see Flowchart)

1. Mother has untreated or inadequately treated syphilis (e.g. treated at >28 weeks gestation but only received one dose of penicillin, or mother treated <28 days before delivery)
2. Infant has clinical signs of congenital syphilis
3. Infant's RPR titre is 4x higher than mother's (e.g. infant RPR is >1:32 when mother's is 1:8); or infant has positive EIA IgM serology
4. Infant is dark-ground or PCR positive from skin lesions/body fluids (secretions), if tests available

D. Further tests if treatment indicated

1. FBC, U+E, LFT, ALT/AST and HIV antibody
2. Lumbar puncture for CSF culture, WCC, protein, TPHA and VDRL titre
3. Long bone X-rays for osteochondritis and periostitis and Chest X-ray for cardiomegaly
4. Cranial U/S scan & eye assessment for interstitial keratitis

Infant follow-up for syphilis by Paediatrics Team

CHECK infant's RPR titres, not TPHA!

A. Infant treated for congenital syphilis at birth

- Check infant has been coded as **A50.9** (congenital syphilis) on AI Shifa
- At months 1, 3, 6 and 12- check RPR titre; there should be a progressive drop in titre over time
- Review at 12 months and if final RPR shows sustained 4x drop from peak level, then discharge

B. Infant not treated for syphilis, RPR is reactive at birth but <4x mother's RPR titre

- At month 3: check RPR and if negative discharge; if still reactive repeat at 6 months
- At month 6: check RPR and if negative discharge; if still reactive repeat at 12 months
- At month 12: check RPR and if negative discharge; if still reactive discuss with paediatric ID consultant

C. Infant not treated for syphilis and RPR is non-reactive at birth

- At month 3: repeat RPR and if still negative, discharge