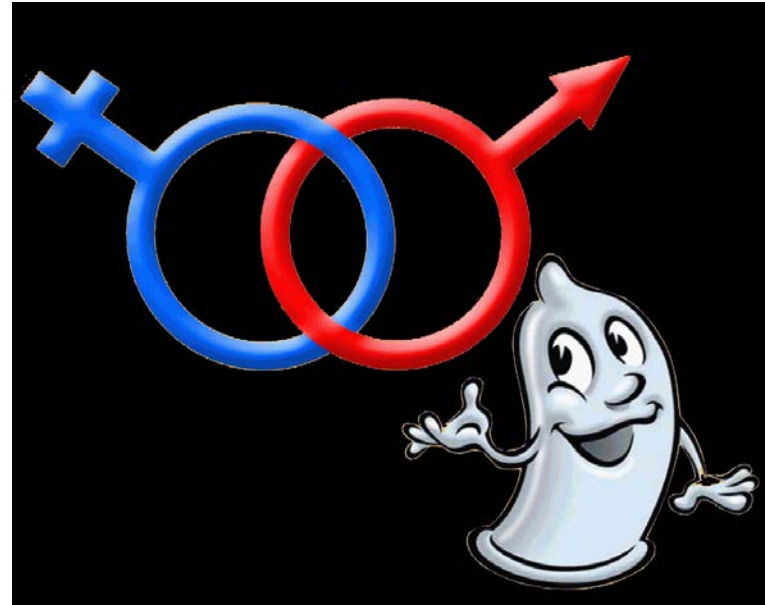


WHAT DO U KNOW ABOUT STIs?



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Bangrak STIs Cluster, Bureau of AIDS, TB and STIs,
Department of Disease Control, MOPH, Thailand

SEXUALLY TRANSMITTED INFECTIONS?



STIs

- Infections are commonly spread by sex, especially vaginal intercourse, anal sex , neovagina intercourse, oral sex and skin to skin contact.
- Most STIs initially do **not** cause symptoms.





STDs

vs.

STIs

STDs

- The infections are commonly /have a high probability of being spread from person to person through sexual contact.

STIs

- The infections may not cause any symptoms.
- **Silent epidemic**



Increase risk of HIV 3-5 times

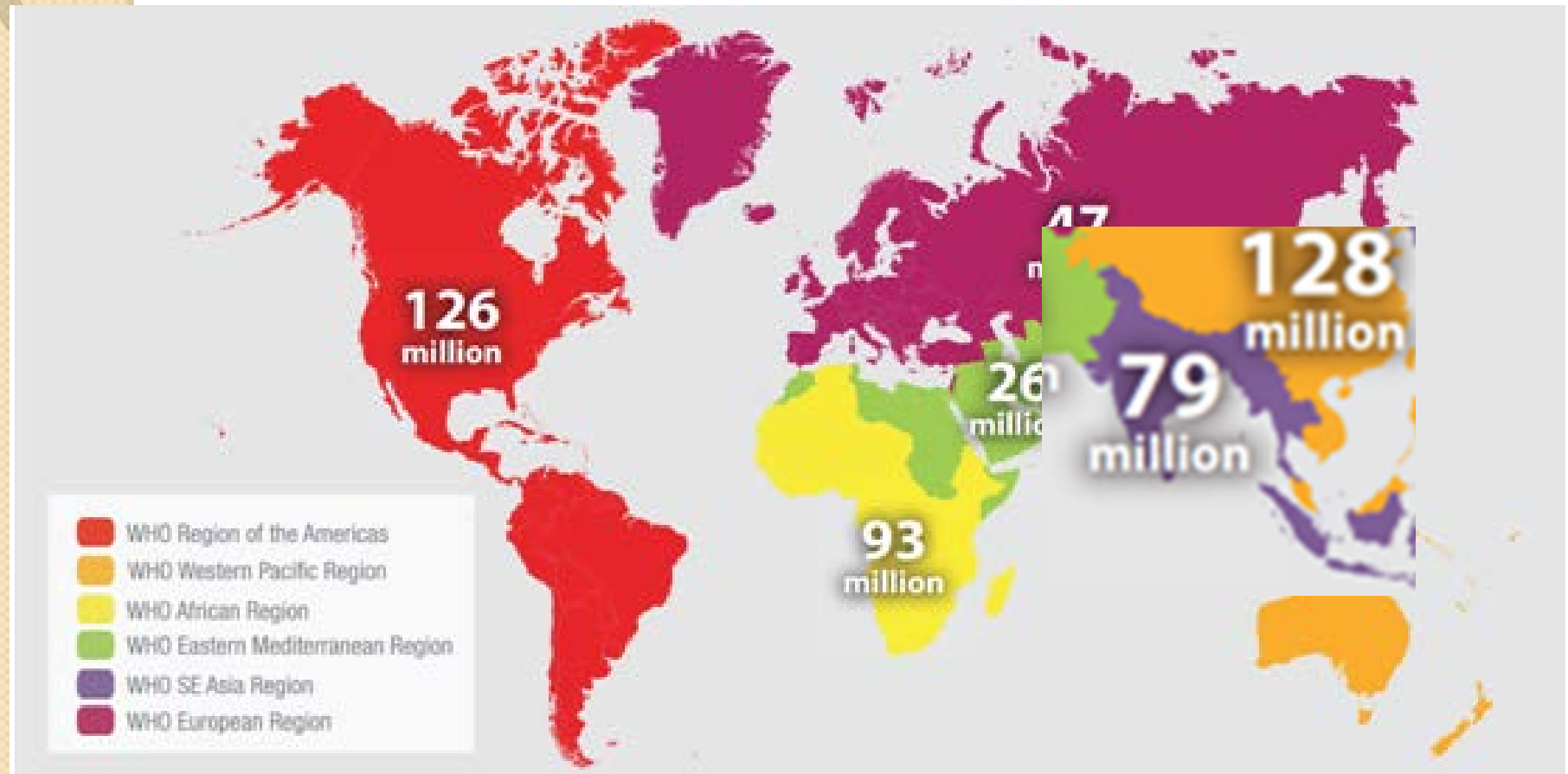


STIs SITUATION

Global STIs situation



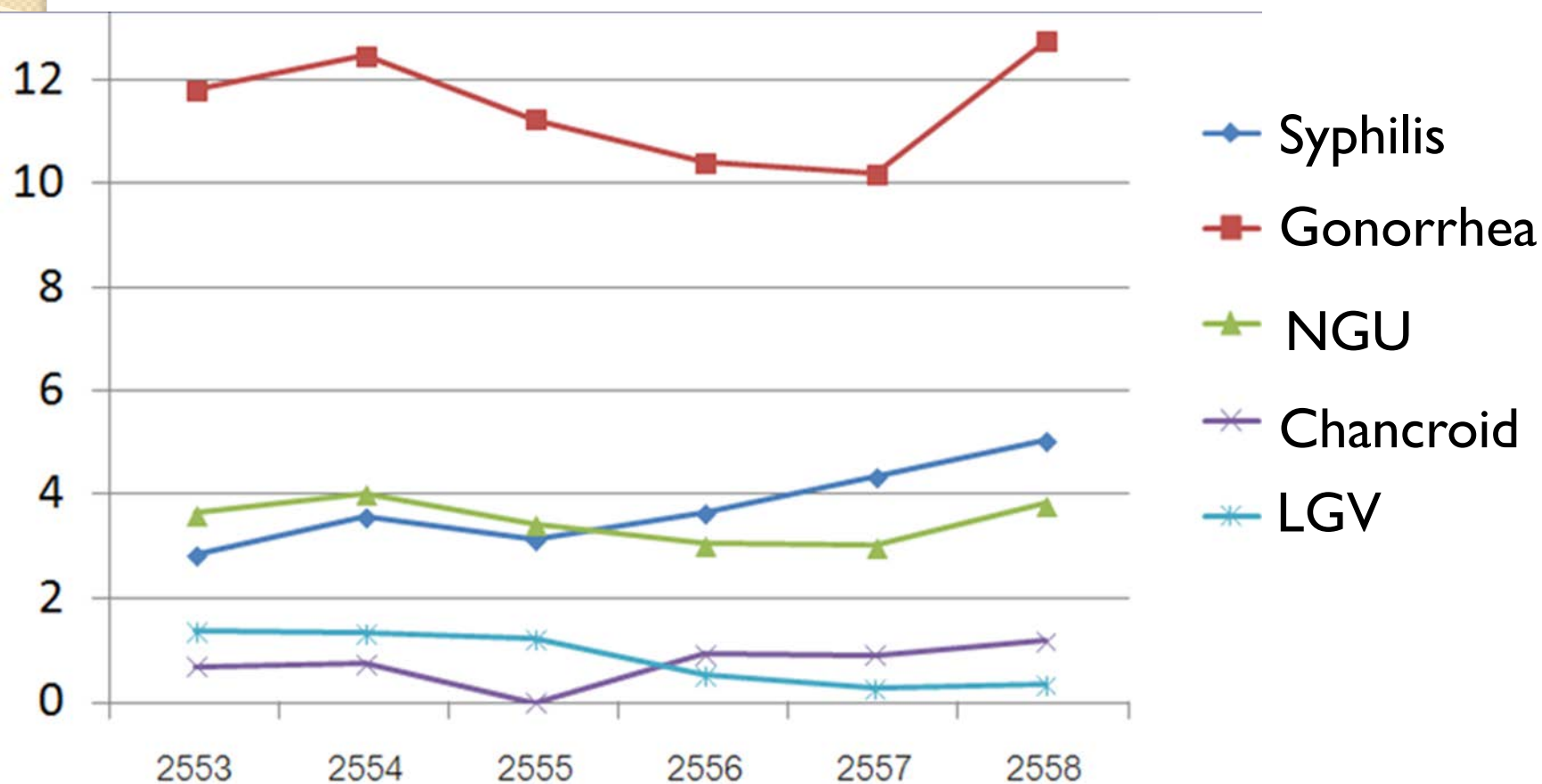
Global STIs situation



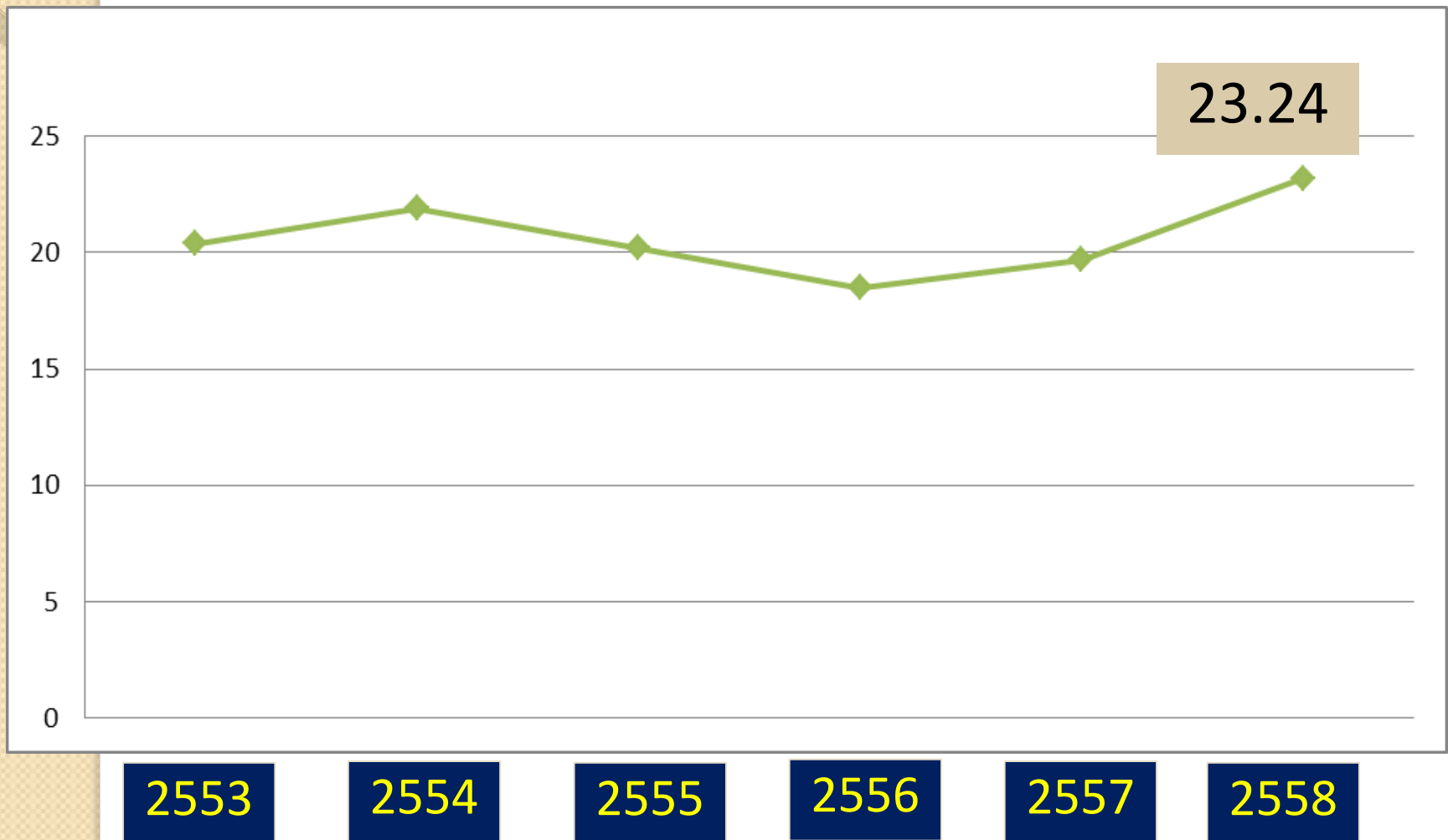
Thailand STIs situation



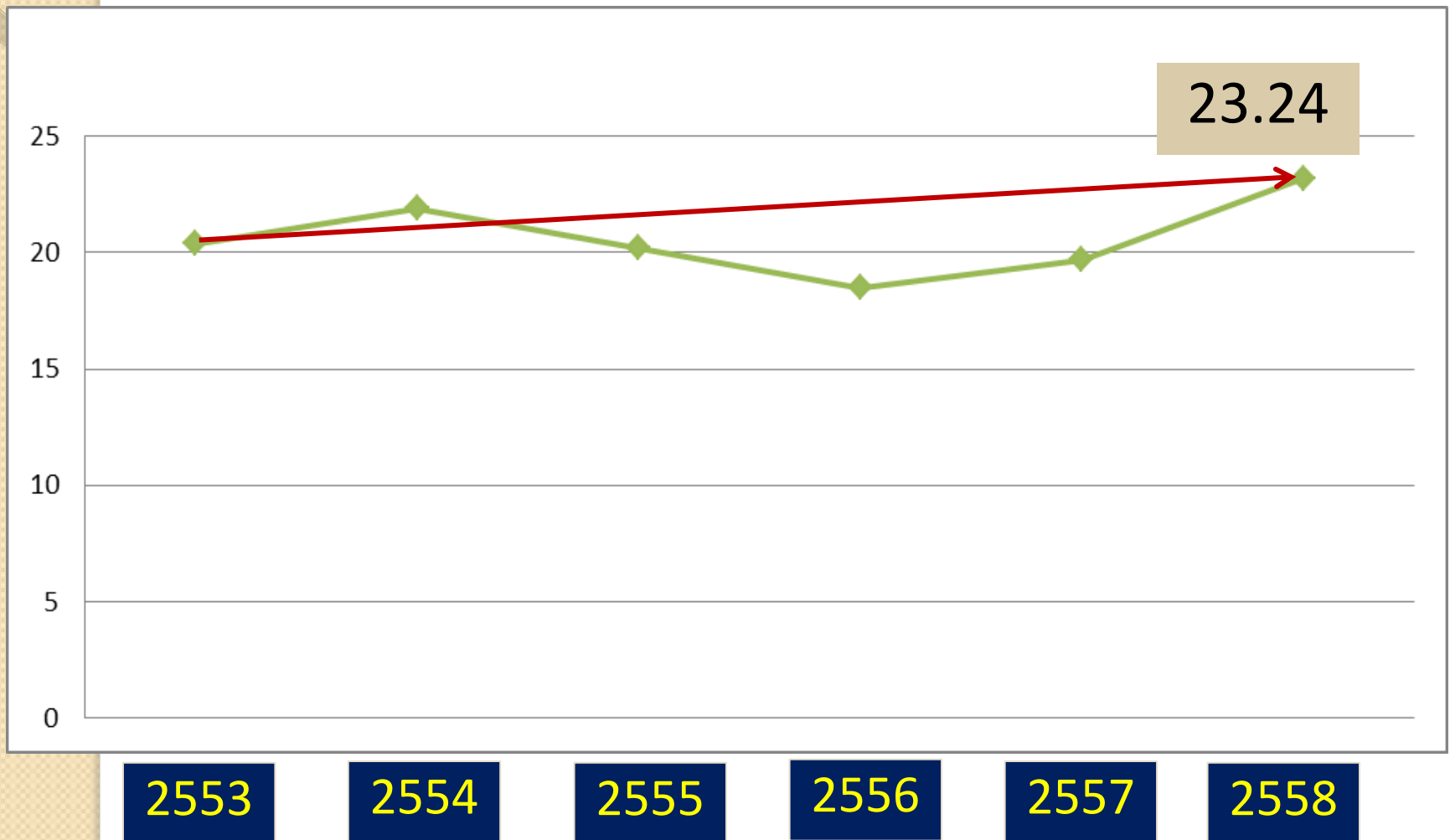
Reported Cases of STIs per 100,000 Population by Disease, Thailand, 2010 - 2015 (B.E.2553-2558)

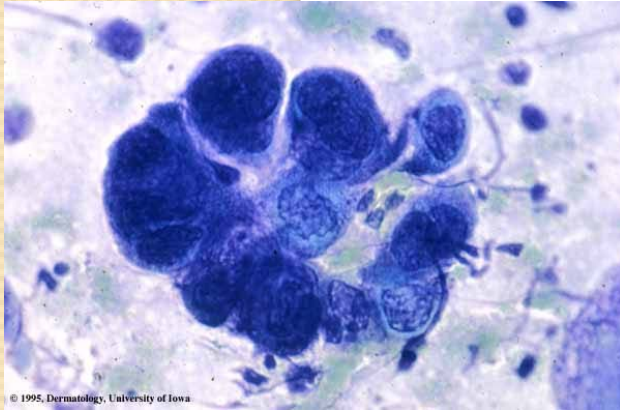


Reported total cases of STIs per 100,000 population by disease, Thailand, 2010-2015 (B.E.2553-2558)



Reported total cases of STIs per 100,000 population by disease, Thailand, 2010-2015 (B.E.2553-2558)



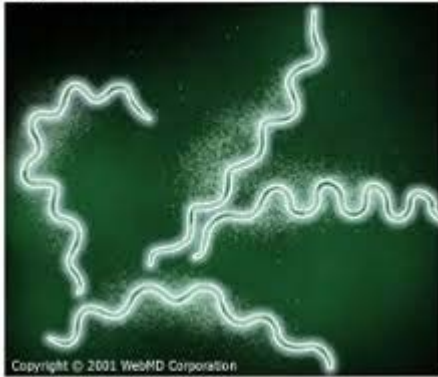


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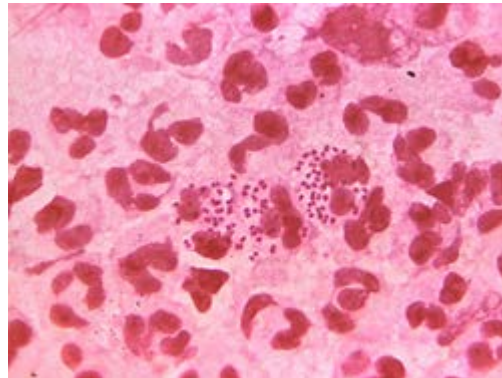
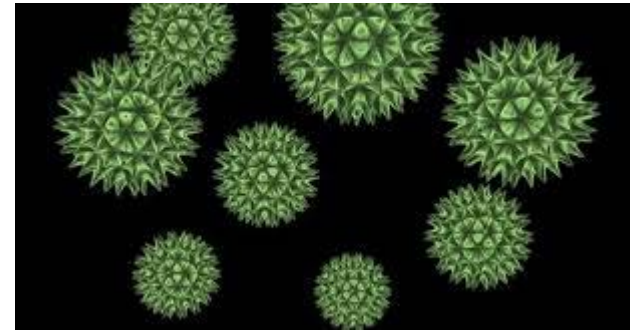


CAUSES?

Syphilis Bacteria



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Causes of STIs

- More than 30 different bacteria, viruses, and parasites can cause STIs.
 - Bacteria e.g. chlamydia, gonorrhea, and syphilis
 - Virus e.g. herpes, HIV/AIDS, and genital warts
 - Parasite e.g. trichomoniasis

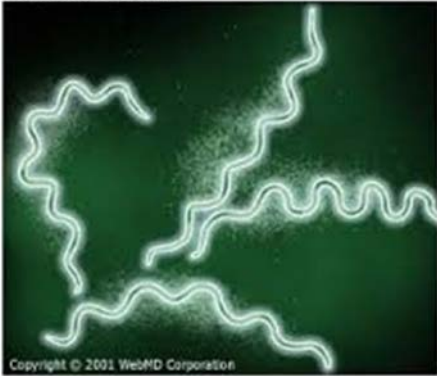


SYPHILIS



Caused : *Treponema pallidum*

Syphilis Bacteria



- A Gram-negative, thin, motile, spiral shaped bacterium in the order *Spirochaetales*.
- Incubation period ~3 wk (10–90 days)

Transmission mode

1. Sexual contact with infected lesion or body fluid (most common)
2. Tranplacenta (less common)
3. Blood tranfusion (rare)

Manifestations of syphilis



- Syphilis has 3 distinct stages
 - Primary syphilis
 - Secondary syphilis
 - Latent stages
 - Early latent syphilis
 - Late latent syphilis
 - Tertiary Syphilis

Primary syphilis

(Hard chancre and regional lymphadenitis)

Principal lesion = Hard chancre

- o Syphilitic chancres are indurated
- o Painless
- o Highly infectious
- o Occur anywhere on the body
- o Heal in 3-6 weeks.



Secondary syphilis

- Begin 6-8 weeks after the appearance of the initial chancre
- There is a high bacteremia during secondary syphilis



alopecia



Secondary syphilis



Secondary syphilis



Secondary syphilis

Condyloma lata



Latent syphilis

- Detectable by abnormal serologic test results
- Asymptomatic

Definition: persons with serological evidence for syphilis who have never received treatment for this disease and who have no clinical manifestations are said to have latent syphilis.

Latent syphilis

- Early latent syphilis (infection onset \leq 1 yr.)
- Late latent syphilis (infection onset \geq 1 yr. or unknown duration)

1/3 slowly progress to 3^o syphilis

The rest remain asymptomatic

Tertiary syphilis



FIGURE 37-12. Disease of the cartilagenous nasal septum.

- Late benign gummatous syphilis
- Cardiovascular syphilis
- Neurosyphilis

Serology

1. Nontreponemal tests :

Use for **screening** and to follow therapeutic response

- VDRL (Venereal disease research laboratory)
- RPR (rapid plasma reagin)

2. Treponemal tests :

Use to **confirm** reactive nontreponemal test result

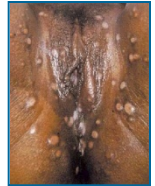
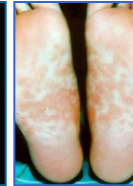
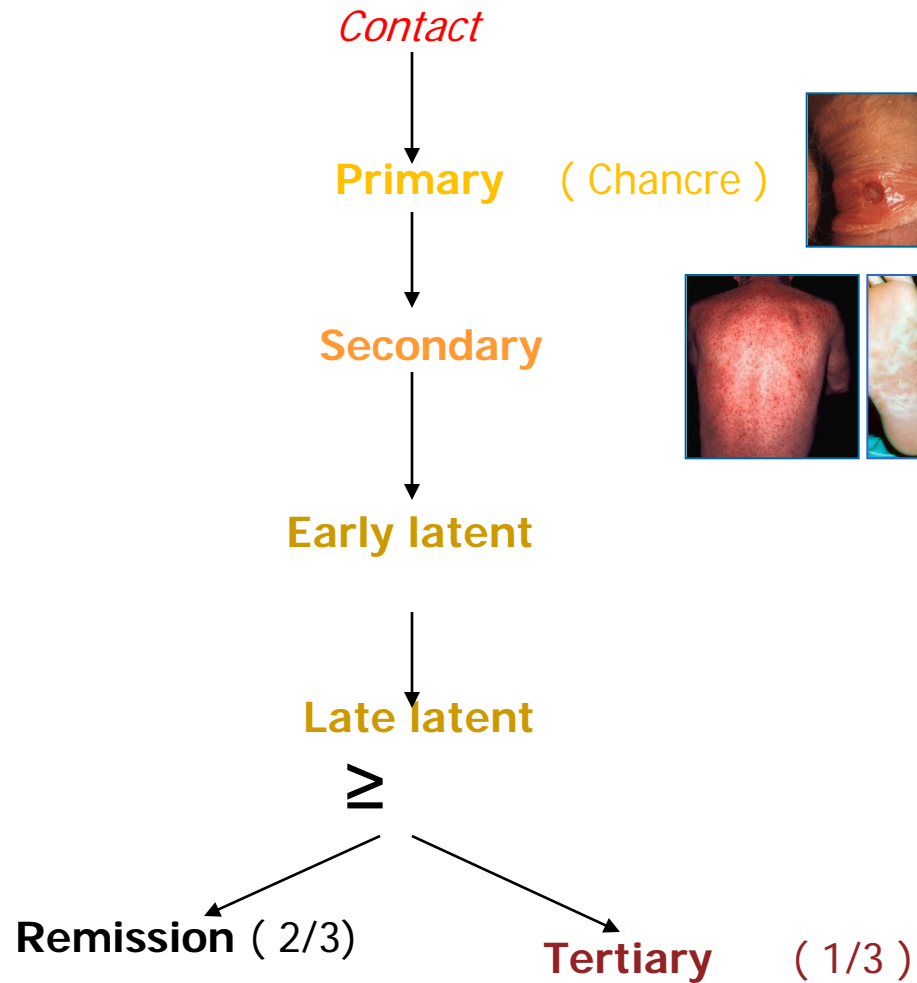
absorption)

- TPHA (Treponema pallidum haemagglutination)
- CIA (Chemiluminescence immunoassays)

Interpretation of Different Serological Tests in Syphilis

Nontreponemal tests	Treponemal tests	Interpretation
+	+	Syphilis
-	+	Treated syphilis Late latent syphilis
+	-	Biological false positive VDRL

VDR/LR PR	FTA- ABS	TPH A
-	+	-
+	+	+
+/-	+	+
+/-	+	+
-	+	+



Treatment

Early syphilis

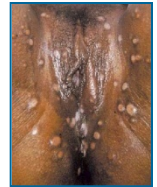


Contact

Primary (Chancere)



Secondary



Early latent

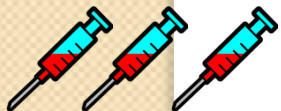
Late latent

\geq

Remission (2/3)

Tertiary (1/3)

Late Syphilis

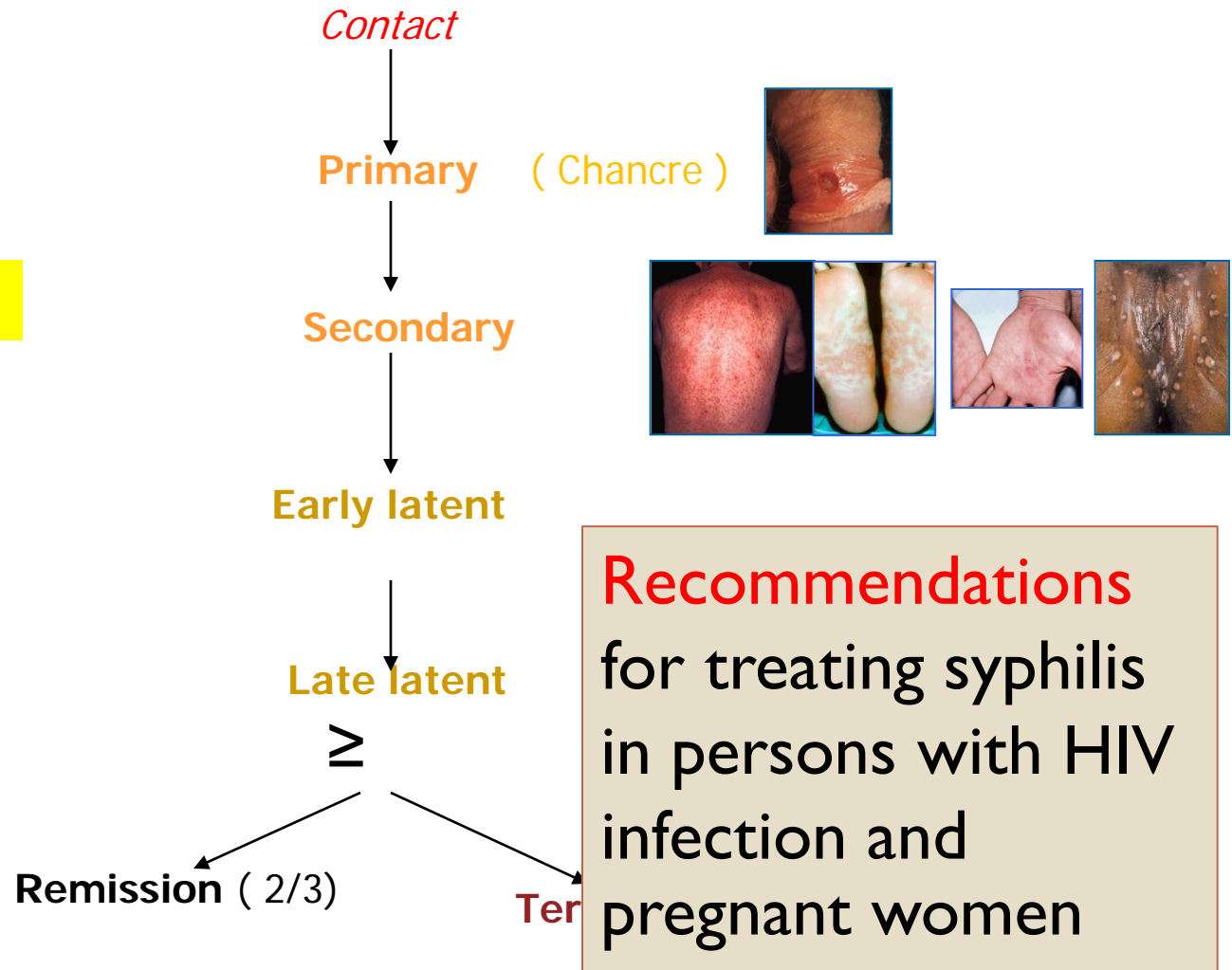


Benzathine penicillin G 2.4 million units

Treatment

Early syphilis

Late Syphilis



Benzathine penicillin G 2.4 million units

Jarisch-Herxheimer reaction

- Reaction is triggered by the toxins released when a large number of bacteria are killed after antibiotic treatment.
- Flu-like symptoms such as fever, headaches, muscle and joint pain.
- Occur within the first 24 hours after the initiation of any therapy for syphilis.

Follow up

- VDRL/RPR at 3, 6, 12, 24 m
- VDRL/RPR at 3, 6, 9, 12, 24 m (HIV)



Treatment failure

- Development of **new clinical signs**
- **Four-fold increase** in nontreponemal test serology
- **Failure** of the nontreponemal test serology to **decrease 4-fold** during
 - 1 year in early syphilis
 - 2 years in late syphilis



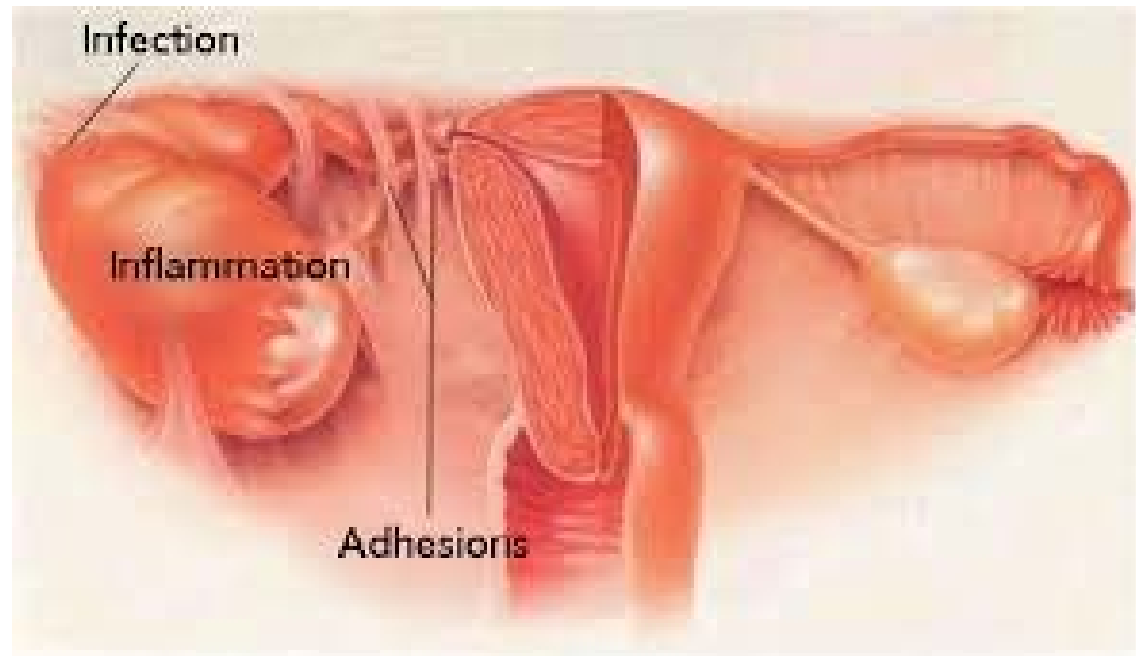
GONORRHEA

Male Genitalia



Female Genitalia

- Asymptomatic
- PID
- Leucorrhea (some)



Pharyngeal Gonorrhea

- Relatively common
- Asymptomatic
- Reservoir for infection



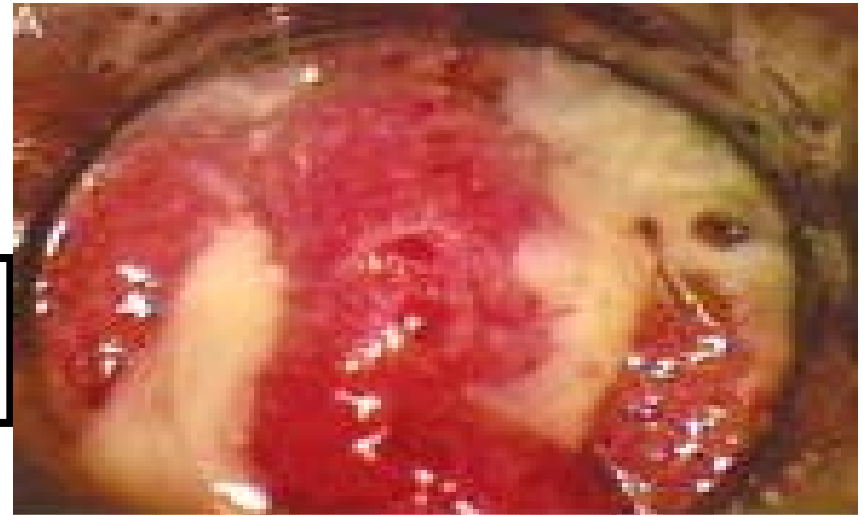
Rectal Gonorrhea

- It is a frequent site of infection in receptive anal intercourse.



- Many rectal infections are asymptomatic.
- The symptoms of rectal gonococcal infection
 - Minimal anal pruritus
 - Painless mucopurulent discharge (often manifested only by a coating of stools with exudate)
 - Scant rectal bleeding
 - Proctitis (severe rectal pain, tenesmus, and constipation)

proctitis



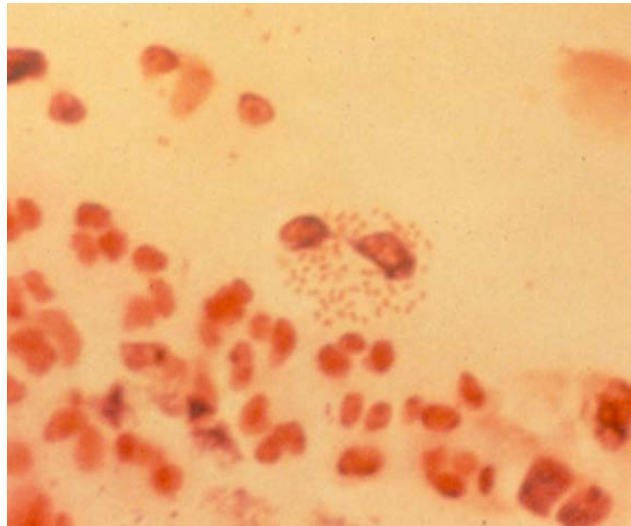
Gonorrhea conjunctivitis



conjunctivitis

Cause : *Neisseria gonorrhoeae*

- Gram stain : Gram-Negative intracellular diplococci **OR**
- Culture : *Neisseria gonorrhoeae* positive



Uncomplicated urogenital, anorectal gonorrhea

Ceftriaxone
250 mg IM



Azithromycin 1 gm

or

Doxycycline(100) 1*2
10- 14 days

Avoid sex at least for 1 week following treatment.

Complicated gonorrhea

Ceftriaxone
250 mg IM



Doxycycline(100)1*2
for 10-14 days

at least 2 days

Avoid sex at least for 1 week following treatment.



NON-GONOCOCCAL URETHRITIS

Male NGU

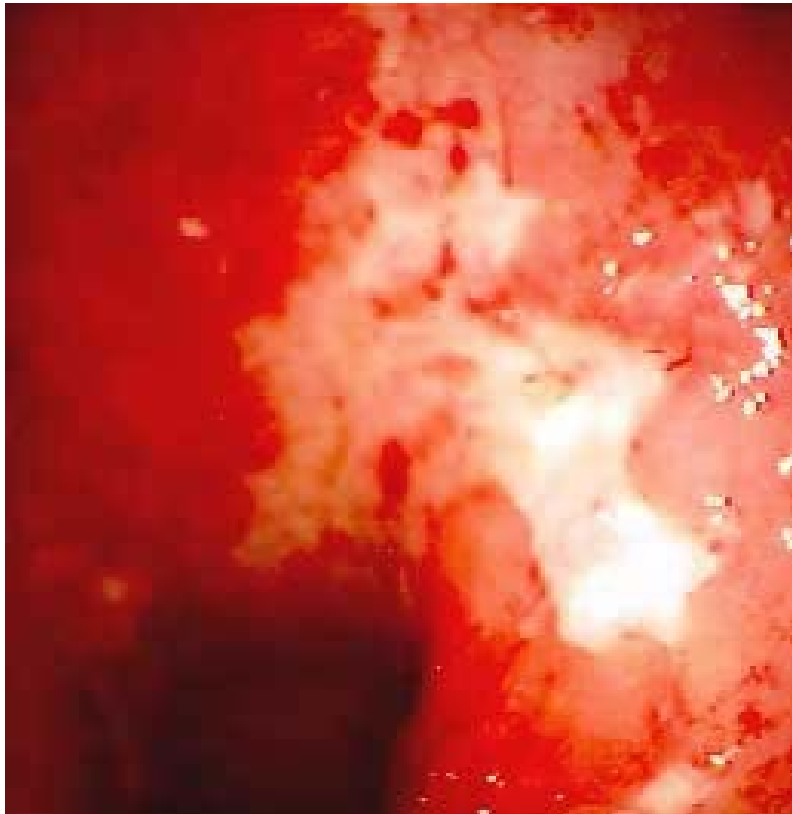


Female NGU



Mucopurulent discharge

Proctitis and Conjunctivitis

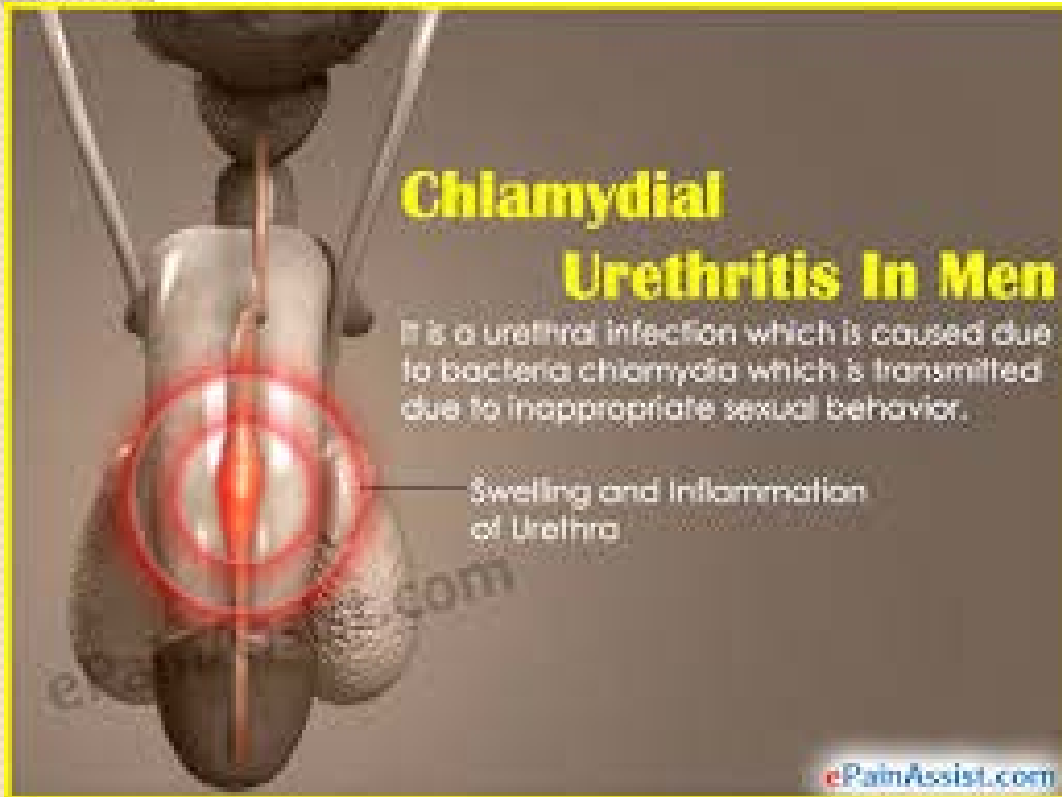


Cause : **Not** *Neisseria gonorrhoeae*

- Other organism not gonorrhea
 - *Chlamydia trachomatis* (50%)
 - *Ureaplasma urealyticum* (10-40%)
 - *Mycoplasma genitalium* (15-20%)
 - *Haemophilus vaginalis*
 - etc.



INVESTIGATIONS



- Gram stain (urethral)
: WBC ≥ 5 cells/oil
field **OR**
- Mucopurulent
discharge from cervix
OR
- Culture : Chlamydia
positive

Treatments

- Azithromycin 1 gm **OR**
- Doxycycline (100) 1*2 pc 14 d



Avoid sex at least for 1 week following treatment.

Don't forget

- Sex **partner(s)** (60d)
- Avoid **sex** during treatment
- Avoid **alcohol** when take doxycycline
- Education
- Follow up





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กรมควบคุมโรค กระทรวงสาธารณสุข



Thank you!

