មជ្ឈមណ្ឌលជាតិគាំពារមាតា និងទារក
National Maternal and Child Health Center

ទិវាសល្យសាស្ត្រ សម្ភព និងរោគស្ត្រី លើកទី៥

ប្រធានបទ៖ «រួមគ្នាបង្កើនគុណភាពសេវាព្យាបាល ថែទាំ និងសង្គ្រោះមាតា និងទារក »

Management of congenital syphilis in NMCHC in 2025

005576

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ថ្ងៃទី២-៣ ខែកញ្ញា ឆ្នាំ២០២៦
មជ្ឈមណ្ឌលជាតិគាំពារមាតា និងទារក

Plan:

- Introduction
- Epidemiology
- Neonatal Evaluation and Diagnostic
- Treatment Protocols
- Follow-up and Monitoring
- Prevention
- Results in NMCHC
- Take Home message

Introduction

- The rising global and regional incidence of congenital syphilis (CS) despite being preventable.
- Transmission of the Spirochetes **Treponema Pallidum/** placenta to the foetus during pregnancy from infected mother: untreated or inadequately treated
- Untreated maternal syphilis is associated with several adverse birth outcomes (ABO):
- ◦ Fatal loss, stillbirth, neonatal death,
- ◦ Symptomatic infected newborns,
- ◦ Premature delivery and low-birth weight.
- Skeletal anomalies
- Long-term neurological sequalae

Epidemiology

- In South-East Asia, the rate of Congenital Syphilis was 145 per 100,000 live births in 2016 [1].
- In Cambodia, the rate of Congenital Syphilis: 105 (2022) and 98 (2023) per 100,000 live births [2].

Neonatal Evaluation and Diagnostic(1)

- **Maternal Screening:** The critical importance of antenatal serological testing (RPR/VDRL and treponemal tests) and the failure of delivery-only testing.
- **Diagnostic:**
- The transfer of maternal IgG antibodies (which can cause false-positive results in uninfected infants).
- Clinical manifestations (e.g., hepatosplenomegaly, Distress respiratory , rash, jaundice) versus asymptomatic infants

Neonatal Evaluation and Diagnostic(2)

- **Diagnostic Workup for High-Risk Neonates:**
- Complete Blood Count (CBC) and liver function tests.
- Lumbar puncture for CSF analysis (cell count, protein, CSF-VDRL) to rule out neurosyphilis.
- Imaging: Long-bone radiographs (looking for metaphysitis or periostitis).
- Audiology and ophthalmology assessments

Treatment Protocols

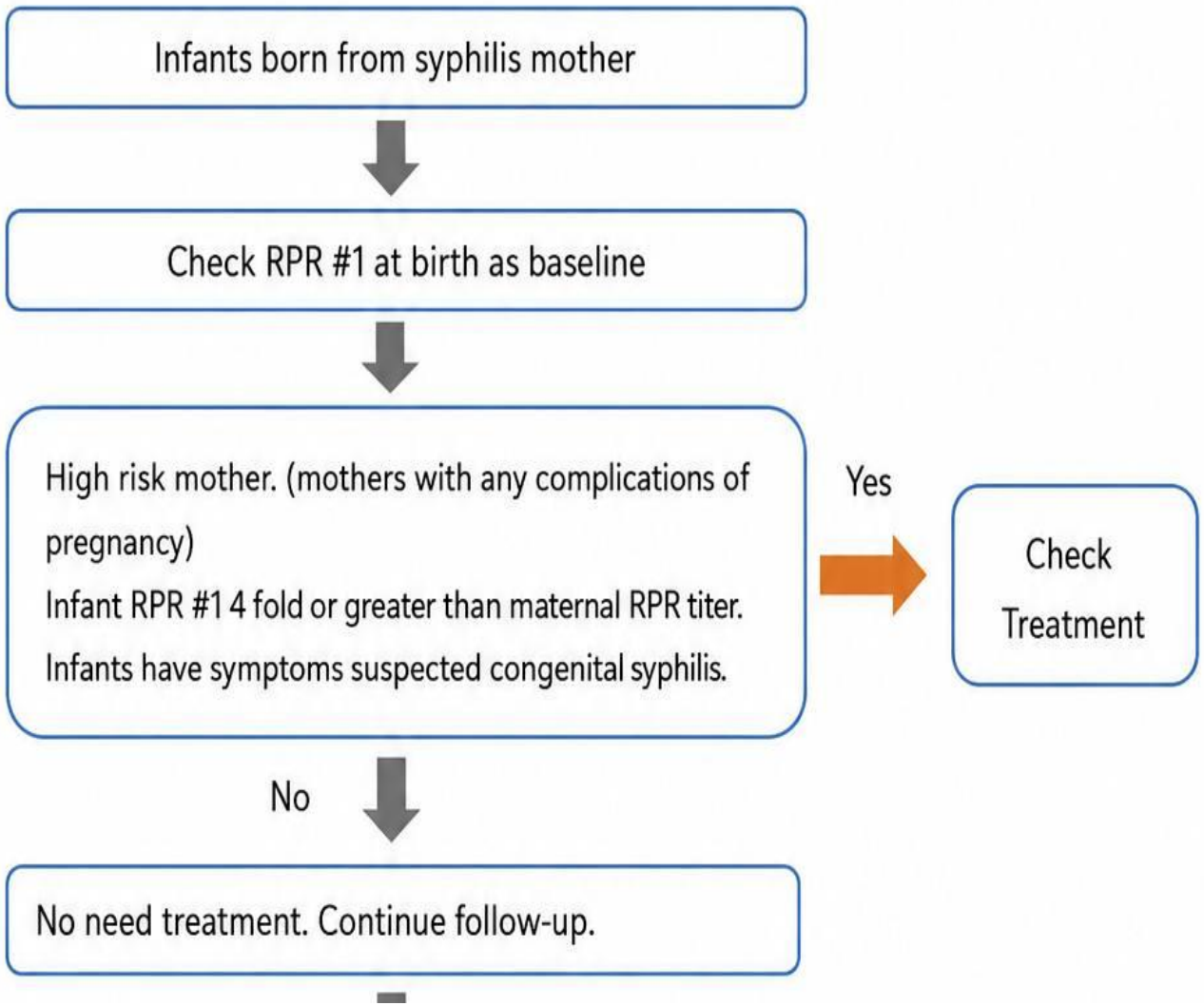
1. AQUEOUS CRYSTALLINE PENICILLIN G

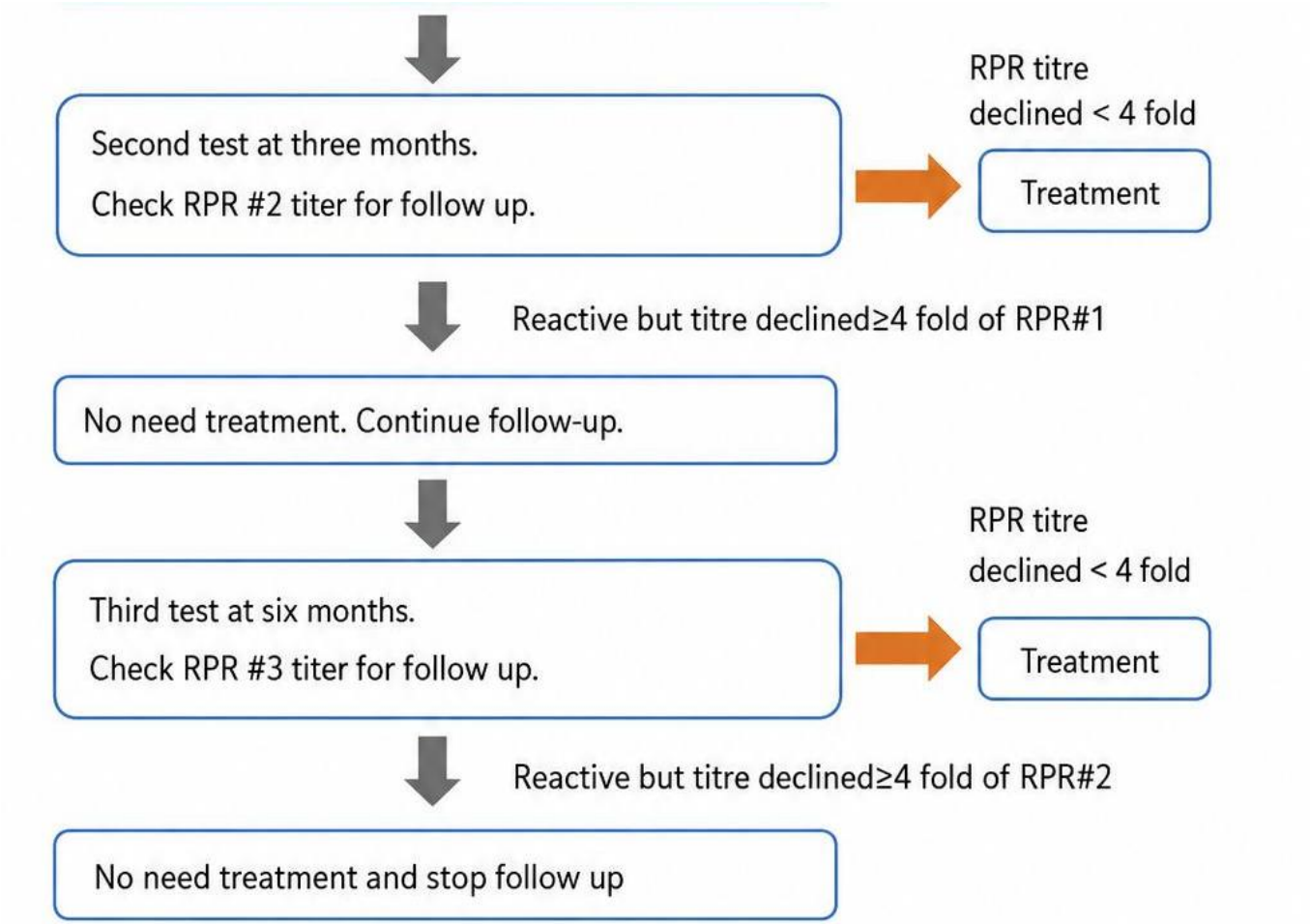
PARAMETER	RECOMMENDATION
Medication	Aqueous crystalline penicillin G
Total Daily Dose	100,000–150,000 U/kg/day
Dose per Administration	50,000 U/kg/dose
Route	Intravenous (IV)
Frequency	• Every 12 hours during the first 7 days of life • Every 8 hours thereafter
Total Duration	10 days

2. PROCAINE PENICILLIN G

PARAMETER	RECOMMENDATION
Medication	Procaine penicillin G
Total Daily Dose	50,000 U/kg/day
Administration	Single dose once daily
Route	Intramuscular (IM)
Total Duration	10 days
Important Note	If 24 hours or more of therapy is missed, the entire course must be restarted.

➢ Flow chart of management for infants with high risk of syphilis




Second test at three months.
Check RPR #2 titer for follow up.
RPR titre declined < 4 fold
Treatment
Reactive but titre declined≥4 fold of RPR#1
No need treatment. Continue follow-up.
Third test at six months.
Check RPR #3 titer for follow up.
RPR titre declined < 4 fold
Treatment
Reactive but titre declined≥4 fold of RPR#2
No need treatment and stop follow up

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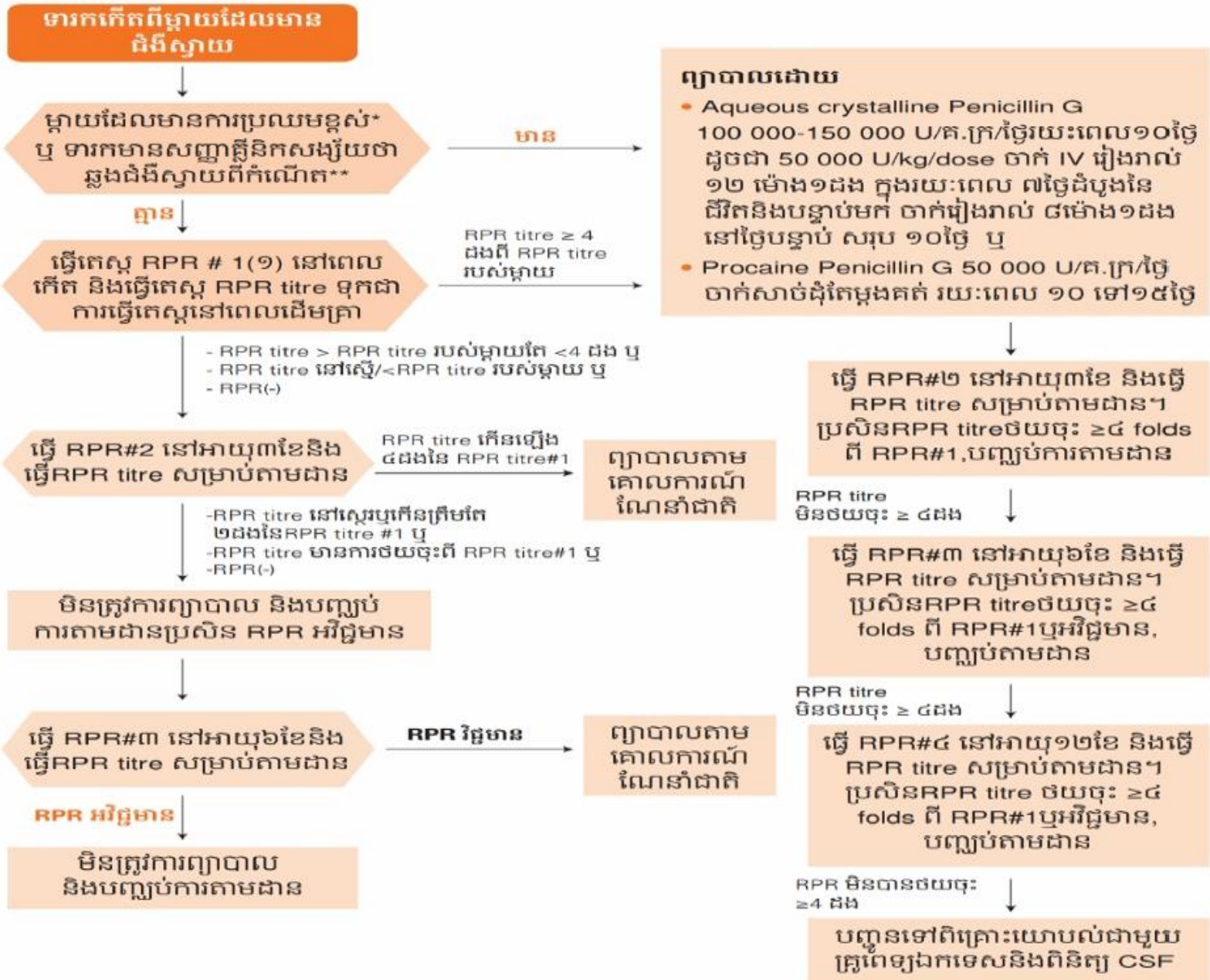


Follow-up and Monitoring

- **Serological Monitoring:** Routine non-treponemal testing at 3, 6, 12 , and 24 months to ensure titters decline.
- **Treatment Success Criteria:** Nontreponemal antibody titters should typically become nonreactive by 6 months of age if the infant was not infected (passive maternal antibodies) or was successfully treated.
- **Neurodevelopmental Tracking:** Long-term monitoring for hearing loss, visual impairments, and developmental delays

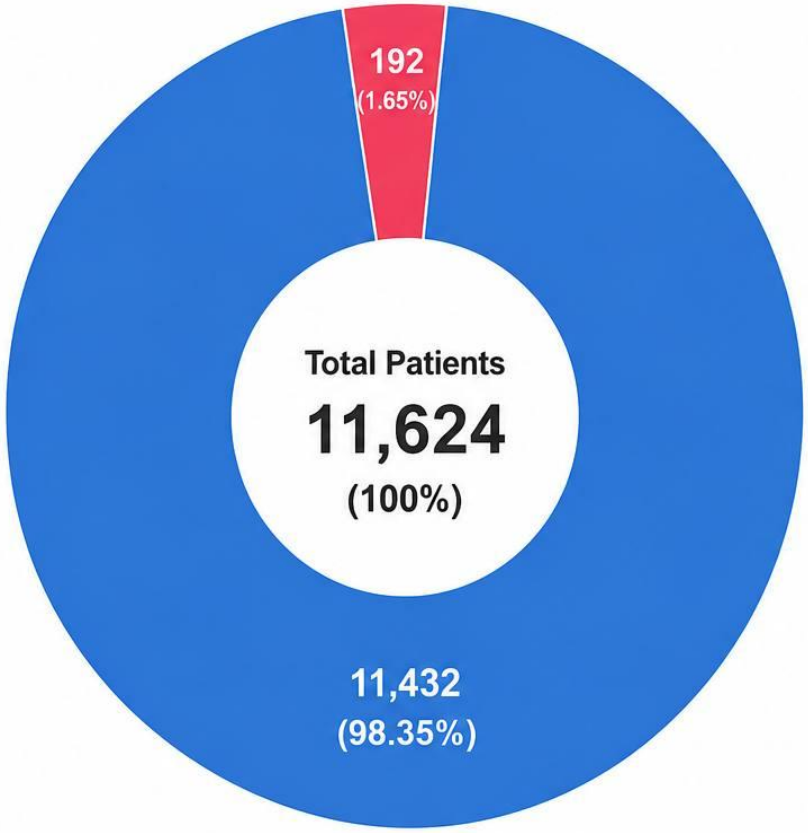
Prevention

- **Primary Prevention:** Early and repeated antenatal care visits, rapid point-of-care testing, and immediate maternal treatment.
- **Public Health Interventions:** Reducing systemic barriers to healthcare and improving partner tracing/treatment.

Results in NMCHC

Proportion of Syphilis Patients

Total Patients vs. Syphilis Patients



Category	Number of Patients	Percentage
Other Patients (Non-Syphilis)	11,432	98.35%
Syphilis Patients	192	1.65%
Total	**11,624**	**100%**

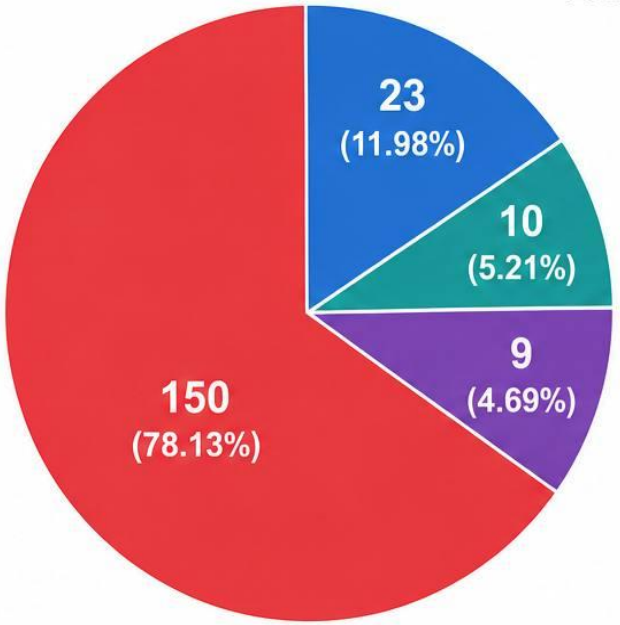
Syphilis patients account for

1.65%

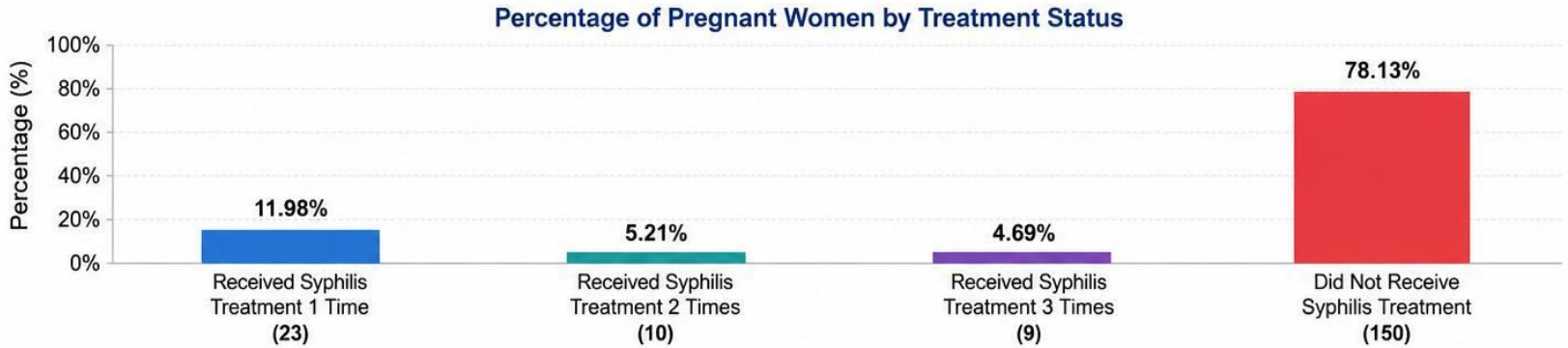
of the total patients.

Syphilis Treatment Among Pregnant Women

Total Pregnant Women: 192



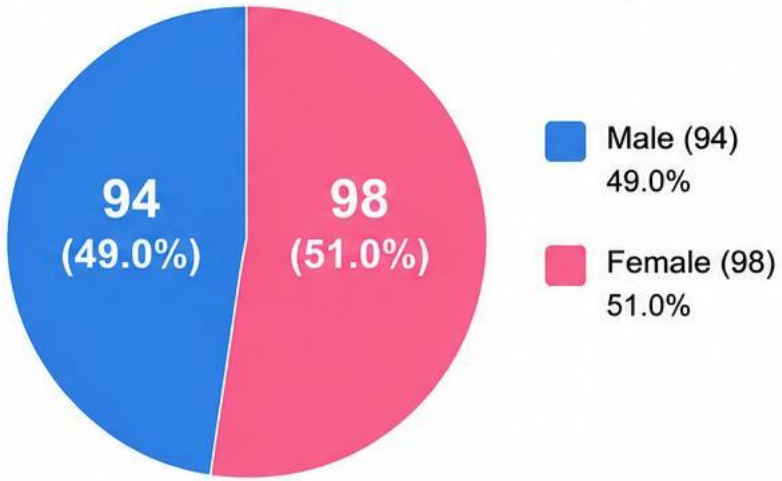
Treatment Received	Number of Women	Percentage
Received Syphilis Treatment 1 Time	23	11.98%
Received Syphilis Treatment 2 Times	10	5.21%
Received Syphilis Treatment 3 Times	9	4.69%
Did Not Receive Syphilis Treatment	150	78.13%
Total	**192**	**100%**



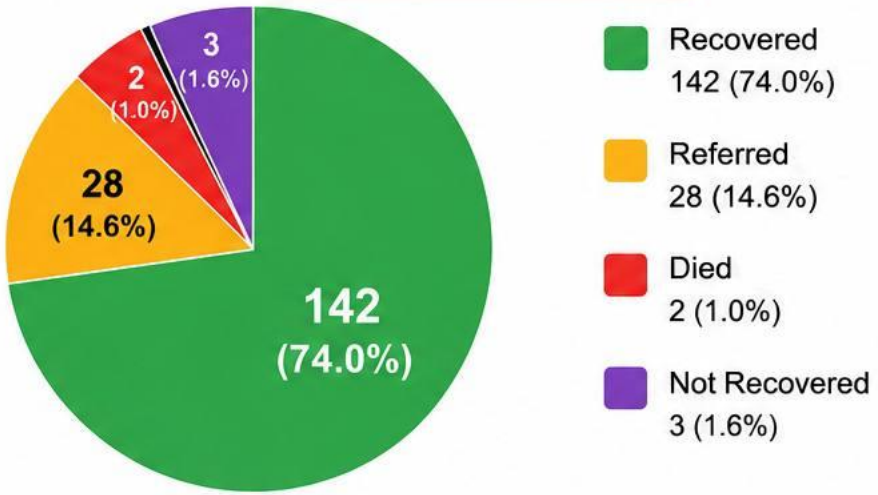
Note: Percentages may not add up to 100% due to rounding.

TOTAL PATIENTS
192
(100%)

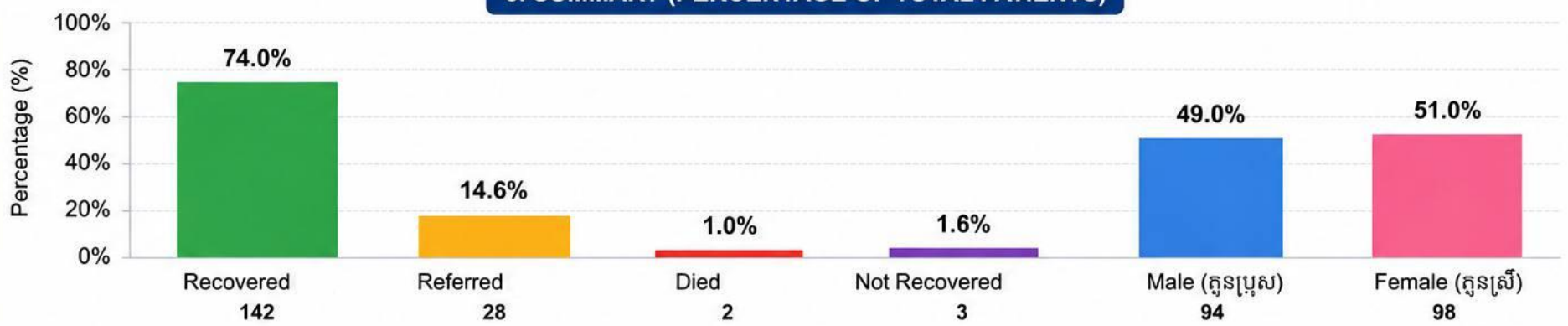
1. GENDER DISTRIBUTION



2. TREATMENT OUTCOME



3. SUMMARY (PERCENTAGE OF TOTAL PATIENTS)



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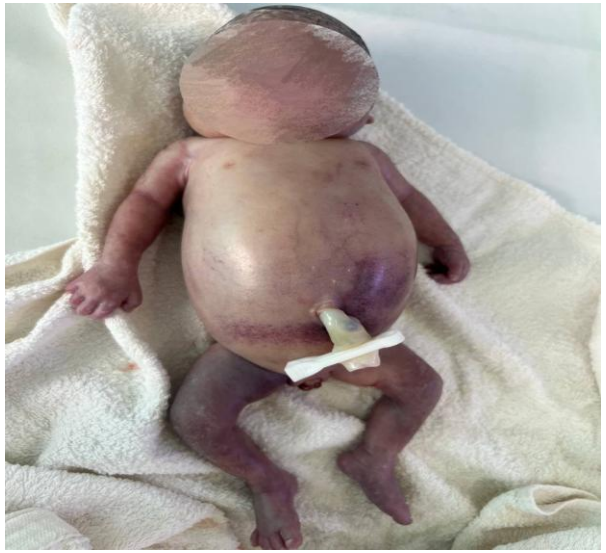

Take Home message

- Congenital syphilis is preventable.
- The incidence is still high in our country.
- PNC G remains the most effective antibiotics.
- Follow-up plans are crucial to evaluate therapy effective.
- Liver functions (transaminase and bilirubin) should be closely monitored.

Reference

1) Neonatal sepsis, National Clinical Practice Guideline, April 2013

2) T. Gomella, Neonatology seventh edition. McGraw-Hill Edition / Medical

3) Treatment of Congenital Syphilis (Cambodia National guideline)

4. Korenromp et al, PLOS One, 2019.

5. NMCHC-WHO CS Tools.

THANK YOU