

Case Report**Case report of secondary syphilis in a fifteen-year-old boy**PJ Perera¹, HP Perera²*Sri Lankan Journal of Infectious Diseases 2018 Vol.8 (1):55-58*DOI: <http://dx.doi.org/10.4038/sljid.v8i1.8189>**Abstract**

Syphilis is a sexual transmitted infection caused by a spirochete, *Treponema pallidum*. We report a case of a fifteen-year-old boy with secondary syphilis. A boy from a poor socioeconomic background presented with a non-healing growth on his penis of about one-month duration. On examination, a condylomata lata was found on the inner aspect of the prepuce, which is a clinical feature of secondary syphilis. He had generalized lymphadenopathy, but had no other clinical features of secondary syphilis. His Venereal Disease Research Laboratory (VDRL) test titre was reactive at 1:128. The Treponema Pallidum Particle Agglutination (TPPA) test was strongly positive, confirming the diagnosis of a treponemal infection. The recommended treatment of a single dose of benzathine penicillin, 2.4 million units was administered intramuscularly. He did not develop a Jarisch–Herxheimer reaction. The lesion on his penis healed within a week of treatment. Follow up VDRL titres were 1:8, 1:4, 1:2 and non-reactive at three months, six months, one year and two years, respectively. Though this was clearly a case of child sexual abuse, the legal system could not be activated because the child categorically denied being abused or having any form of sexual contact.

Keywords: Secondary syphilis, Child sexual abuse

Introduction

Syphilis is a sexual transmitted infection (STI) caused by a spirochete, *Treponema pallidum*. If left untreated, syphilis goes through several stages. During primary syphilis, typical indurated, non-tender ulcers known as chancres appear at the site of inoculation. Without treatment, a chancre disappears but the disease progresses to secondary syphilis with multi organ involvement in four to ten weeks.¹ Condylomata lata is a characteristic clinical feature during this stage. They are non-keratinized, painless, broad based, flat, velvety, wart like lesions, which tend to develop in warm, moist sites of the genitals and perineum. Condylomata lata are teeming with the causative organism – *Treponema pallidum*, which are identified by dark ground microscopy. In children, syphilis may manifest as early or late congenital syphilis (transmitted from mother to child during pregnancy) or acquired due to sexual contact as in this case.

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Received 21 February 2018 and accepted 23 April 2018



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Presenting Concerns

A 15-year old boy from a poor socioeconomic background, was referred to a branch sexual transmitted infection clinic by a dermatologist. He had a non-healing growth on his penis for about a month. He had no past history of genital ulcers.

Figure 1 : Condyloma lata on inner aspect of prepuce



Clinical Findings

He did not have any other symptoms and denied any form of sexual exposure. His father is a labourer and mother was dead. He is a school dropout, working and living in a timber mill. On examination, a condylomata lata was found on the inner aspect of the prepuce (Figure 1). He had generalized lymphadenopathy but no other clinical features of secondary syphilis.

Diagnostic Focus and Assessment

His Venereal Disease Research Laboratory (VDRL) titre was 1:128. Treponema Pallidum Particle Agglutination (TPPA) was strongly positive. His urine full report, liver function tests and renal function tests were normal. Human Immune Deficiency Virus (HIV) combination antigen-antibody test and Hepatitis B surface antigen test were negative. Diagnosis of secondary syphilis was made, based on clinical features of condylomata lata, supported by the presence of a strongly positive TPPA and high VDRL titre.

Therapeutic Focus and Assessment. A single dose of benzathine penicillin, 2.4 million units was administered intramuscularly. He did not develop Jarisch–Herxheimer reaction. Lesion on the penis healed within a week of treatment.

Follow-up and outcomes

He was followed up for two years. VDRL titres at three months, six months, one year and two years were declining, and were 1:8, 1:4, 1:2 and non-reactive respectively, indicating successful treatment outcome.

Though syphilis acquired through nonsexual contact is described in the literature², considering his adverse social circumstances, especially poor parental security, the possibility of sexual abuse was high. He was a minor and age of consent for sex in Sri Lanka is 16 years. Even with consent, any sexual act with a child is child sexual abuse. However, any action with regard to child abuse was not possible because the child categorically denied being abused or any form of sexual contact. The child's father was informed about the situation, but refused to make a complaint to the police. We discussed the future safety of the child with the father and informed him that it is illegal to employ a child. The father agreed to take him home, but sending him to school was an issue as he has been out of school for several years.

Discussion

The clinical features of primary syphilis can be atypical, and the infected person may not notice them, as in this case. Due to widespread use of antibiotics, atypical clinical presentations of syphilis are common now. The diagnosis of secondary syphilis is usually made on clinical features and supported by serological tests. Histological or microbiological evidence is not essential for the diagnosis.³ In secondary syphilis, the VDRL titre is in the range of R₁₆ –R₁₂₈. Positive VDRL and TPPA, generalized lymphadenopathy and condylomata lata were diagnostic of secondary syphilis in this child. The prompt clinical response with penicillin, and VDRL titres dropping from 128 to non-reactivity over a two year period provided further evidence of the diagnosis.

Clinical features of secondary syphilis result from dissemination of *T. pallidum* and the immune response of the body. If not treated, clinical features usually wax and wane over about 2 years. During secondary syphilis a variety of skin lesions appear, which were not observed in this case. The characteristic condylomata lata clinched the diagnosis. These occur in moist areas such as prepuce, scrotum and perianal region. Condylomata lata appear as papules which hypertrophy, resulting in flat topped wart like lesions. Commonly papules encircle the free margin of foreskin as in this child.

The treatment of syphilis is penicillin based because *T. pallidum* is very sensitive to penicillin. For cure, 0.018 mg/L serum concentration of penicillin should be maintained for 7 – 10 days. A single dose of intramuscular benzathine penicillin is adequate to achieve this level^{3,4} which is of special advantage in patients with doubtful compliance.

Child abuse should be considered in any child presenting with STIs.⁵ This case highlights the difficulty in activating the legal system in some cases of presumptive child abuse, especially when the child denies being abused. We could not obtain any information from the child on the possibility of sexual activity (where, when or with whom). Without definitive evidence it was not possible to proceed with legal action. Under these circumstances at least the child's safety should be ensured. When sexually abused at a tender age, some children become sexually aroused, predisposing them to further abuse.

Conclusion

Children presenting with clinical features of STIs are most likely subjected to some form of child sexual abuse. Therefore, any such scenario needs thorough evaluation preferably with involvement of the child protection authority. Similarly, children living under vulnerable circumstances for sexual abuse need evaluation for STIs.

Informed Consent.

Consent from the father was obtained to publish this case report.

Conflicts of interest

None

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