A Gay Man with Secondary Syphilis: Report of a Case with Special Emphasis on the Care of Men who have Sex with Men

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Abstract

The World Health Organization estimates that, annually, there are 12 million new cases of syphilis worldwide. The number of cases reported in Taiwan is on the rise; from 2000 through 2008, the number of annually reported cases of syphilis in Taiwan has increased from 3838 to 6526. The incidence of syphilis has increased even more in certain at-risk populations, such as men who have sex with men (MSM) with rates around 8.1-13.8%, depending on the city.

Gender-related medicine has been part of the core curriculum in undergraduate, postgraduate and continuing medical education programs. We must integrate gender issues into daily clinical practice. We present the case of a gay man with secondary syphilis and discuss the serologic diagnosis of syphilis, when to perform lumbar puncture, a treatment regimen, reasonable follow-up periods, and how to eliminate stigmatization and implement holistic health care for men who have sex with men.

Key words: Gay man, secondary syphilis, gender-related medicine.

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Introduction

Syphilis is a sexually transmitted disease(STD) caused by the spirochete Treponema pallidum(T. pallidum). If not properly diagnosed and treated, it can cause from genital ulcers, generalized skin rash to chronic severe and dreadedly effect on the cardiovascular and nervous systems, and detrimental influence on reproduction and neonatal demise. The WHO estimates there are 12 million new cases of syphilis annually worldwide, and the number of cases reported in Taiwan is on the rise[1]. From 2000 through 2008, the number of annually reported syphilis in Taiwan has increased from 3838 to 6526. The incidence of syphilis has even more increased in certain at-risk populations, such as men who have sex with men(MSM) with rates around 8.1-13.8%, depending on the city[2-5]. Here we presented a case of MSM with secondary syphilis and discussed serologic diagnosis of syphilis and how to implement a holistic care to MSM.

CASE REPORT

A 41-year-old man, boss of an interior design company, called our out-patient-department due to pustules over both palms and soles for about 1 week. Wearing an silver bracelet over right wrist, he was accompanied by an adult masculine man. He had no past medical history of importance including STD,drug allergy history and illicit drug use. Physical examination revealed clear consciousness, no fever, stable vital signs, no lymphadenopathy, no oral ulcer, no heart murmur, no genital ulcer

or discharge over urethral orifice, no papillary neogrowth over anus; but with erythematous ulcerative pustules, diameter around 5-20mm, over both palms and soles, several pin-sized erythematous papules over trunk noted(Fig. 1). The meticulous drawing of the pedigree revealed he was a MSM. Based on history and physical examination, a tentative diagnosis of secondary syphilis was made. With privacy and empathy, we surfed the website of Centers for Disease Control, R.O.C.(Taiwan) and discussed the management of syphilis, safe sex and a lifetime ban on blood donations imposed by Taiwan Blood service Foundation with patient and his friend under patient''s agreement. An initial empirical dose of intramuscular therapy with benzathine penicillin 240mU was started after negative penicillin skin test. During the visit, we also screened other STDs, such as gonorrhea, lymphogranuloma venerum, and hepatitis A, B and surveyed for depression, suicide ideation. Totally three-weekly benzathine penicillin administrations were arranged and notification to the authority done after confirmation of the diagnosis by the Venereal Disease research Laboratory(VDRL) and Treponemal pallidum hemagglutination assay(TPHA) tests and excluded HIV infection. Serial serum antibody titer shifts of VDRL and TPHA were shown on figure 2. The pustules healed about 2 weeks later. Patient was free of clinical disease and seronegative in nontreponemal test at the 9- month follow up after treatment.

Discussion

Speaking of treponemal infection, microbiologic tests are essential in making or excluding a diagnosis. T. pallidum cannot be cultured from clinical specimen and direct visualization of the spirochetes on dark field microscope of lesion exudates from primary and secondary syphilis is the only direct microbiologic test available. However most syphilitic patients are asymptomatic and serologic tests are required to make a final diagnosis. For serologic diagnosis of syphilis, there are two standard types of tests, nontreponemal and treponemal tests. Nontreponemal serologic tests which detect antibodies directed against membrane phospholipids are cheaper, simpler but less specific than treponemal tests and can be applied for syphilis screening, monitoring of syphilis activity and treatment response after excluding biologically false positive and prozone effects[6,7]. Serologic diagnosis of syphilis should be confirmed by specific treponemal serologic test. Once positive, treponemal-specific tests generally remain positive throughout a patient's life; thus, a positive treponemal test does not differentiate between active infection and prior treated infection without the aid of nontreponemal test[1,6]. So the serologic data of the nontreponemal and treponemal tests must complement each other. Patients should be reexamined clinically and serologically 3 months, 6 months and 12 months after treatment; more frequent evaluation might be mandatory on HIV-infected patients and uncertain follow-up ones[1,6,8,9]. Given the fact that nontreponemal and treponemal tests might remain reactive for a long time, printout that shows the patient's titers at the time the patient was considered cured would be helpful to avoid over-treatment by another physicians[10]. In the era of HIV epidemic, more complicated interactions noted between syphilitic serologic tests and HIV infection. Thus we must be more cautious in interpreting the nontreponema/treponema serologic data of an HIV-infected person[1,11]. Under some circumstances, rapid serologic tests for syphilis may increase coverage of syphilis screening and enable screening-and-treatment at the same day. If done outreach to the gay communities, it may empower the disease control[12].

Syphilis is known as a great imitator, and so is the neurosyphilis. Terribly neurosyphilis can occur during any stage of the disease, resulting in the clinical dilemma ” when to perform a lumbar puncture”, especial in HIV positive and neurologic symptoms-signs free patients. In HIV-infected patients with syphilis, lumbar puncture should be performed for those with syphilis of >

1 year's duration and a serum nontreponemal test titer≧1:32, as well for other patients with highly suspicious of neurosyphilis[1,6,13-15]. Neurophilis is very unlikely at serum TPHA titers below 640[15]. Because treatment failure might be the result of unrecognized CNS infection or HIV infection, many specialist recommend CSF examination in such situations[1,17].

Palmar rash is one of the hallmarks of secondary syphilis. But we should also take Rickettsia infection, atypical measleas, hand-foot-mouth disease, drug-induced erythema multiforme into consideration. For this patient, there conditions could be excluded by careful history-taking and physical examination.

Penicillin is considered first-line and cornerstone therapy for all stages of syphilis, since T. pallidum was still sensitive to this antibiotic since 1943, when excluding immunocompromised HIV-infected patients[1,17]. The treatment of primary and secondary syphilis was a single dose penicillin injection. For fear of bizarre, uncertain past medical history and undetected concomitant HIV infection, we adopt the three-weekly penicillin administrations for all the primary and secondary syphilis.

How to improve health care for the MSM ? The real pathophysiology of MSM is still unknown. The gender role of a person may change with time and should not be stigmatized[18]. Though gender-related medicine has been one of the core curricula in undergraduate, postgraduate and even continuing medical education program, there is actually little formal medical education or compact knowledge about the health care of sexual minority groups. The acknowledgement of the significance of sexuality and sexual orientation of patients is the initial step of holistic care. First of all, we should keep alert on the presence of MSM in our patients and well prepared to accept their "coming out" with empathy. The use of reflection facilitated by clinical supervision and continuing education will be presented as a potential way forward in the arena of nurses' and doctors' attitudes to patients' sexuality[19]. Some MSM with experienced prejudice in relationship to their race, income level, sexual orientation, or a combination of these were alienated sufficiently to decrease their health protective behavior[20]. MSM reported a range of health and mental health problems, and involvement in health-compromising behaviors, such as overweight/obesity, depression, and suicidal thoughts/attempts, anal dysplasia and many were found to have higher rates of STD[21,22]. HIV screening and prevention addressed routinely for MSM during primary care settings. Those health concerns and risks reported by MSM are preventable and can be intervened by any number of sectors, including health care and social service suppliers, religious organizations, school, and employers[21]. Guidelines for clinical practice about MSM can be very simple: ask the appropriate questions, be open and nonjudgmental about the answers[22]. If so, we can build a MSM-friendly caring environment and try to afford a holistic care to the MSM.

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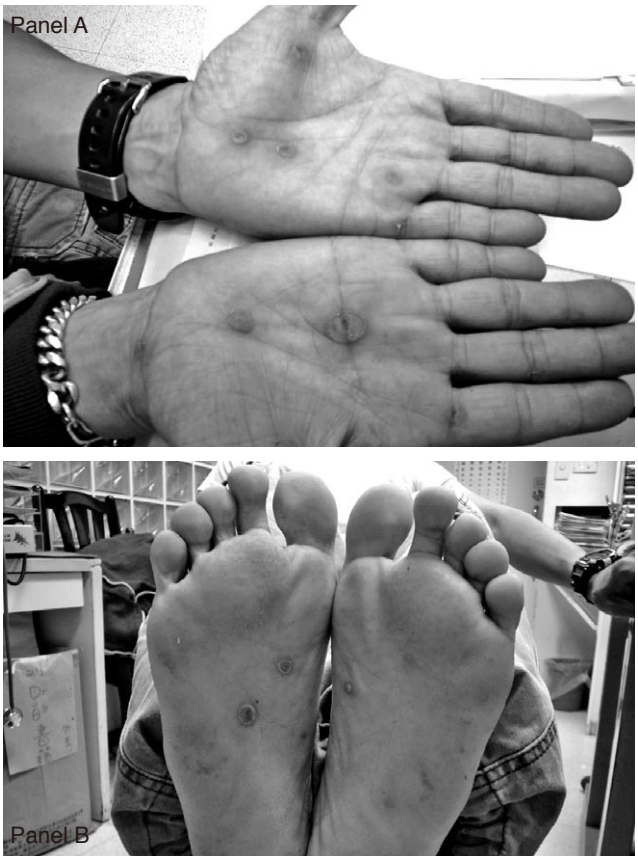

Fig.1 Multiple erythematous pustules over both palms(Panel A) and soles(Panel B)

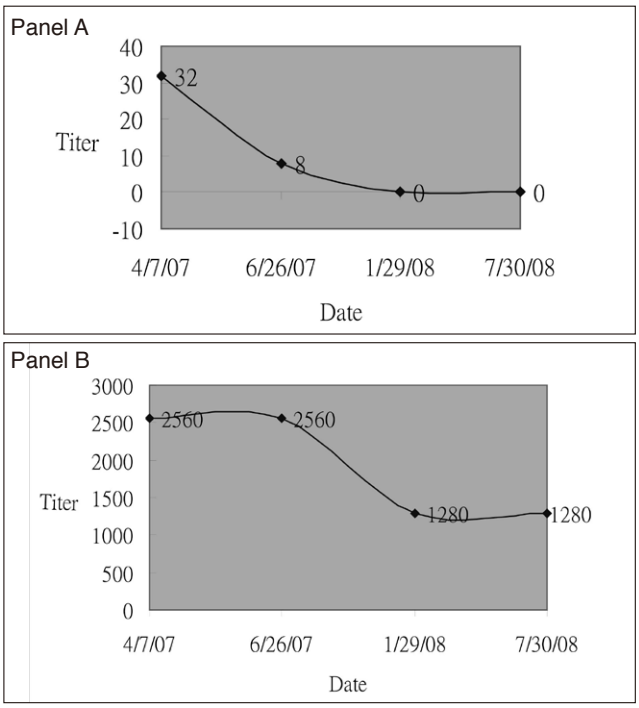

Fig. 2 Antibody levels of sera of the patient monitored for 15 months after treatment by VDRL(Panel A) and TPHA tests(Panel B)

男同性戀合併二期梅毒：一病例報告並著重於男同性戀之照護

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摘　　要

世界衛生組織估計全球每年約有新增壹千兩百萬例梅毒個案，台灣每年梅毒通報個案也在不斷增加中。從西元2000年至2008年，台灣梅毒通報個案由3838例增加至6526例。在某些高危險族群，就如男同性戀，其發生率更有快速增加趨勢。依不同地域，其比率可達8.1-13.8%。

性別相關醫學目前已是畢業前（後）一般醫學訓練和醫師繼續教育的核心課程之一。 我們如何將其精神與內涵融入日常行醫當中？在此我們提出一位男同性戀合併二期梅毒的個案，探討其血清學診斷，接受腰椎穿刺適應症，藥物治療處方，合理的追蹤期和如何去除MSM污名化並提供全人照護。

關鍵字：男同性戀、二期梅毒、性別相關醫學