

# Urethritis Chlamydiosis, Proctitis Chlamydiosis, and Anal Condyloma Acuminata in Versatile

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**Abstract:** Versatile is a sexual role as both insertive and receptive in men who have sex with men. Versatiles are prone to be infected to transmit sexual transmitted infections (STIs). On versatiles, we can found concomitant STIs such as urethritis and rectal condyloma acuminata. A case of chlamydiosis urethritis, proctitis chlamydiosis, and condyloma acuminata in 24-year old male was reported to unveil multiple STIs in genital and anal on versatile. Physical examination showed no urethral discharge but solitary vegetative skin colored tumor with verrucose surface on perianal. Gram staining from urethral meatus displayed 5-6 PMN/high power field (hpf) and 1-4 PMN/hpf from rectum, polymerase chain reaction (PCR) from urethra and rectum unveiled positive result for Chlamydia trachomatis, and human papilloma virus (HPV) DNA genotyping examination revealed type 11 HPV. Varying types genital and anal of STIs could be found on versatiles, thorough examination should be done. High transmission in versatile can become our concern, both genital and anal examinations should always be performed simultaneously.

## 1 INTRODUCTION

The increasing number of sexually transmitted infections (STIs) has increased since 2004, allegedly due to the increasing number of men who had sex with men (MSM) (Mayer, 2011). In MSM, there are sexual role such as top, bottom and versatile (Peinado et al., 2014). Based on research in New York in 2013, it is known that there are 63% of versatile MSM (Tieu et al., 2013). STIs in MSM may manifest clinically in the form of urethritis, proctitis, and anogenital warts (Stam, 2008). The occurrence of urethritis chlamydiosis, proctitis chlamydiosis, and anogenital warts simultaneously in one MSM have not been reported. Nevertheless, in a study in Stockholm, there were 430 MSM with 17 cases (16%) of whom experienced perianal CA and chlamydiosis at the same time (Bratt et al., 2009). In a San Francisco study, it was found that from 452 MSM, there were 28 (6.2%) cases of whom had chlamydia urethritis with chlamydia

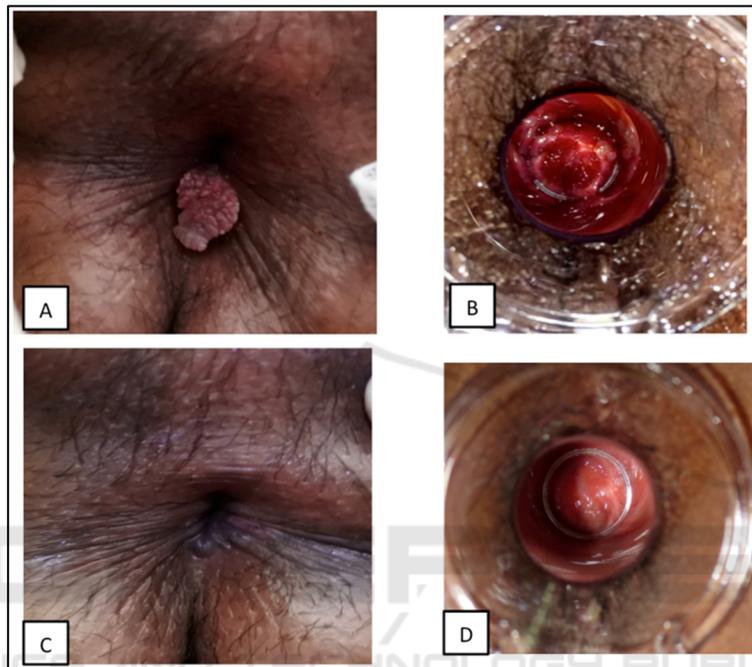
proctitis compared to those who only had infection in one site (Kent et al., 2003).

## 2 CASE

A 24 year-old-male, a college student, unmarried, came with chief complaint of skin colored nodule around the anus that feels itch. Patient is an MSM, unmarried, coitarche with a boyfriend three years ago. Risk factors in patients are having a same sex sexual partner, multiple, sex in anus-genital manner, as top and bottom, without condom. On venerological examination, there was not urethral discharge, but were perianal vegetation, solitary lesion, irregular shape, size of 4x3x2 cm, clear border, raised, dry, in the form of a tumor with a skin colored verrucose surface (Fig. 1A). Anoscopic examination found erythema rectal wall, no papules, vesicles, ulcers or erosions, no discharge (Fig. 1B).

Gram stain smear examination from external urethral meatus revealed epithelial cells in 1-2 /hpf, PMN in 5-6 /hpf, no Gram negative bacteria, intra and extracellular (Fig. 2A). Result of Gram stain smear examination from rectal discharge found epithelial cells in 3-4 /hpf, PMN cell in 1-4 /hpf, no Gram negative bacteria, intra and extracellular (Fig. 2B). PCR on urethral and rectal positive Chlamydia

infection, HIV test negative and DNA genotyping HPV found HPV type 11. Patients was treated with 1 gram of single doses of azithromycin followed by doxycycline 100 mg twice daily for seven days because infection was still present. Condyloma acuminata therapy performed by electrocautery. therapy gives effective results, with no infection found and no relapse of the condyloma acuminata



.Figure 1. A. Condyloma acuminata on perianal; B. Anoscopic examination found erythema rectal wall; C. Perianal region 2 weeks after electrocautery; D. Anoscopic examination after 2 weeks therapy, there is no erythema rectal wall.

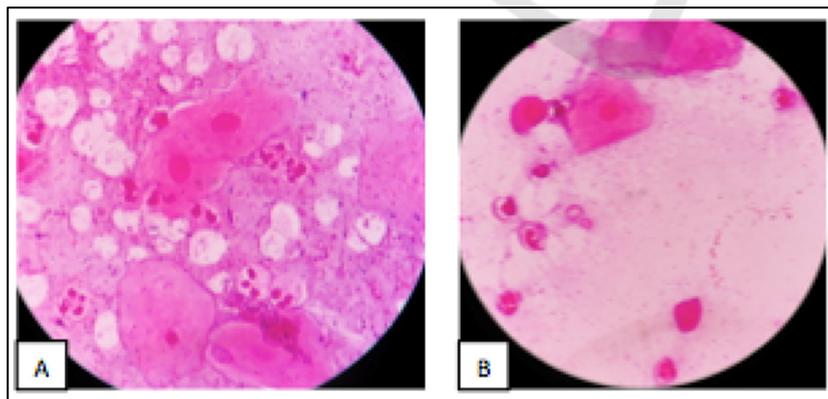


Figure 2. A. Gram stain smear examination from external urethral meatus revealed PMN cell; B. Gram stain smear examination from rectal discharge found PMN cell.

### 3 DISCUSSION

Based on a study in San Francisco in 2004, STIs in MSM are increasing (APCOM, 2008). In an Indonesian epidemiological study in 2012, it is estimated that there are about three million MSM in which 60,000-80,000 of them are in Jakarta (Anonim, 2017). Based on research in the United States in 2011 on 21,000 MSM aged 18-24 years, it was found that 74% of them did orogenital sexual intercourse, 42% were anal receptive, and 30% were anal insertive (Bratt et al., 2009). Based on these studies, it is known that the transmission of STIs in MSM can be an infection of the mouth, genitals, and anus. The incidence of urethritis, proctitis, and anogenital warts in STIs are generally transmitted through anogenital sexual intercourse, especially on versatile (Tieu et al., 2013). Versatile is a pattern of sexual behavior in an MSM that acts as both insertive and receptive (Peinado et al., 2014). In a Dominican Republic study in 2013, it was found that out of 100 MSM, 39 of them were versatile, of which 22 (56%) of them had STIs, while those who were not versatile only 19 (31%) out of a total of 61 (Brito et al., 2015). In another study, in New York in 2013, it was found that 48% versatile did not use condom while doing sex, compared to 31.2% of insertive sexual partners, and 19.9% had receptive sexual intercourse without using condom (Tieu et al., 2013). At a research in Peru in 2007, the versatile's occupation observed in the study is known to be mostly an employee and only 10% versatile are commercial sex workers (CSWs). Characteristics of sexual behavior as versatile are more often found in whom with higher education (Peinado et al., 2014). The incidence of urethritis chlamydiosis, proctitis chlamydiosis, and condyloma acuminata of the anus occurring simultaneously in one MSM have not been reported. Nevertheless, based on research in Stockholm there were 430 MSM with 17 cases (16%) with rectal condyloma acuminata and chlamydiosis occurring simultaneously (Bratt et al., 2009). In another study, reported from 452 MSM, there were 28 patients with chlamydia urethritis and chlamydia proctitis occurred simultaneously (Kent et al., 2005). Factors that increase the risk of multiple STIs in this case report are versatile MSM, 24 years of age, rarely use of condom, high level of education (undergraduate student), and history of multiple partner.

The most common causes of urethritis in MSM are *N. gonorrhoeae* and *C. trachomatis*. Clinical manifestation of urethritis chlamydiosis is generally asymptomatic in about 90% (Rompalo and Quinn,

2008). Clinical manifestations may be in the form of urethral discharge with a clear to murky mucus, frequently in the morning/morning drops, or in the form of spotting inside the underwear and may accompanied with dysuria, and nocturia. Diagnosis of urethritis is done to determine the cause of urethritis. The easiest examination is by direct examination. In direct microscopic examination of urethritis chlamydiosis can be found PMN > 5/hpf. Adjunct examination for the diagnosis of urethritis are confirmed by polymerase chain reaction (PCR) examination against Chlamydial DNA. Sensitivity of PCR examination to detect urethritis is 96% and the specificity is  $\geq 99\%$  (Takahashi et al., 2008).

Proctitis can be distinguished into ulcerative and non-ulcerative. Non-ulcerative proctitis in MSM can be caused by *N. gonorrhoeae* and *C. trachomatis*. Clinical manifestations of chlamydia proctitis are generally asymptomatic. In one study, it was found that 91% of proctitis patients did not give any symptoms. In symptomatic proctitis, common symptoms found were a frequent need to defecate (Rompalo and Quinn, 2008). Adjunct examination on proctitis include anosopic examination to evaluate the presence of ulcer, inflammation, discharge, or bleeding on the anorectal mucosa. Based on several studies it is known that diagnosis of proctitis can be established when PMN cells are obtained  $\geq 1$ /hpf. Adjunct examination for the diagnosis of urethritis and proctitis chlamydiosis is established through the examination of PCR. On proctitis chlamydiosis PCR, the sensitivity is 92% while the specificity is 99%. In this patient, no symptoms of urethritis or proctitis were found. The result of adjunct examination in this case was PMN 5-6/hpf from urethral smear and 3-4/hpf from rectal smear, and PCR examination result on both showed positive Chlamydia (Rompalo and Quinn, 2008; Takahashi et al., 2008).

According to the National Guidelines for STI Treatment in 2015, first-line treatment options for urethritis chlamydiosis are a single dose of one gram azithromycin per oral or doxycycline 2x100 mg/day per oral for seven days (Takahashi et al., 2008). First-line and second-line treatment options in chlamydia proctitis are similar to chlamydia urethritis. Follow-up of urethritis and proctitis are always performed and when infection is present, treatment may be replaced (Rompalo and Quinn, 2008). Based on a 2008 study in Japan, it is known that in the treatment of urethritis chlamydiosis, the cure rate of patients treated with azithromycin was 86% (Takahashi et al., 2008). In a study at Birmingham in 2004, the cure rate of patients with

chlamydia proctitis treated with azithromycin was 97.5% (Habib and Fernando, 2004). Single dose of one gram Azithromycin was administered to the patient as an initial therapy, at the time of control on one week later, PMN are still present as much as > 30 /hpf in the urethra and 2 /hpf in rectal, so that the patient were given 100 mg doxycycline therapy twice per day for seven days and gave good results. Based on England study in 2013 it was found that doxycycline administration had a failure rate of < 5% compared to azithromycin. Antibiotic resistance testing of azithromycin was not done because of lack of facility availability. Patient experiences improvement on the observation day 16 in the form of no PMN cells found on the Gram smears examination in the urethra and rectal.

Anogenital type CA warts in the form of exophytic lesion, multiple, flat or raised, skin colored, brown or white. Site of predilection of CA wart are on the external or internal genitalia, perianal, anal canal, perineum, mons pubis, and groin. Most of CA wart patients do not complain of skin disorders, although symptoms may include itching, burning sensation, or bleeding (Lacey et al., 2013). The diagnosis of anogenital warts can generally be established based on anamnesis and physical examination. One of the adjunct examination for anogenital warts is genotyping examination of HPV DNA (KalGen®). This examination aims to determine the type of HPV (Anonim, 2012). The diagnosis of CA type of anogenital warts in this patient was confirmed based on anamnesis and physical examination of a skin-colored tumor with uneven verrucous surface, itchy, neither pain nor bleed easily, perianal, supported by the result of KalGen® examination which shows the HPV DNA type 11.

The choice of treatment for anogenital warts should pay attention to various factor such as: patient's choice, availability of treatment, and experience of the health provider. Various treatment options can be used for the treatment of warts anogenital, divided into: the treatment applied by the health provider (provider-administered modalities), such as cryotherapy, surgery, electrocautery, trichloroacetic acid (TCA) and CO<sub>2</sub> lasers. Treatments that can be applied by the patient (patient-applied modalities), such as podofilotoxins, sinecatechin, and imiquimod. The choice of treatment using surgery such as electrosurgery performed when the planned visit will be in one time, patient's choice, and the size of the wart is large. Based on a study, it is known that the clearance rate of the electrosurgery use on the

anogenital warts is 95-100% with a recurrence rate of 22% (Patel et al., 2013). In this patient, the electrosurgery treatment is chosen based on patient's choice who want to quickly removed the wart.

## 4 CONCLUSION

Varying types genital and anal of STIs could be found on versatile such as urethritis, proctitis, and/or genital warts, thorough examination should be done. High transmission in versatile can become our concern, appropriate treatment should provide an effective result.

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