# Current Therapy for Condyloma Acuminata of the Patients Attending Female STD Unit, Siriraj Hospital

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Objective: To describe the treatment pattern of condyloma acuminata in female.

**Material and Method:** The 5-year medical records of 449 women treated for genital condyloma acuminata at the Gynecologic Infectious Diseases and Female Sexually Transmitted Disease (GID-FSTD) unit were reviewed. Data included the distribution of age, client by category, anatomical site and size, serologically coexisting sexually transmitted infection (STI), and treatment modalities.

**Results:** About half, 50.1%, of treatment was the application of topical trichloroacetic acid; followed by podophylline in the proportion of 35.5%. While the electric cauterization and imiquimod applications were uncommon therapy. Two-fifth of the subjects, 40.7%, was completely cured, and the remaining cases required additional management.

Conclusion: The present setting, the wide range of treatment available is reflection of the fact that there is no ideal management.

Keywords: Condyloma acuminata, Trichloroacetic acid, Podophylline, Electric cauterization, Imiquimod

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Prevention of genital tract condyloma acuminata had recently drawn public attention since it was well documented of relationship to carcinoma of cervix uteri. One of the most popular preventions of such genital human paillomavirus (HPV) infection is HPV vaccination<sup>(1-4)</sup>. In spite of a big wave of HPV vaccination, prevention for carcinoma of cervix<sup>(1)</sup>, treatment of genital HPV infection is an important issue concerning individual transmission in couples or in the epidemiological point of view.

The past five years data about genital condyloma acuminata at the Gynecologic Infectious Diseases and Female Sexually Transmitted Disease (GID-FSTD) unit, Siriraj Hospital showed certain number of patients attended the unit and had been treated for HPV<sup>(5,6)</sup> with some success but some had resistant-to-treatment outcomes<sup>(5,7,8)</sup>.

The patient's economic burden for rather long follow-up visits according to treatment plan appointments creates an increasing loss to follow-up rate followed by incomplete treatment among those patients.

The review of medical records of women treated for genital condyloma acuminata was analyzed to describe the treatment pattern of condyloma acuminata in females.

# **Material and Method**

The 5-year medical records of women treated for genital condyloma acuminata at GID-FSTD unit, between 1 October 2004 to 30 September 2008, were obtained. Data included the distribution of age, client by category, anatomical site and size, serologically coexisting sexually transmitted infection (STI), and treatment modalities.

The associated sexually transmitted infection (STI)<sup>(9)</sup> such as herpes genitalis and cytological study of cervical cancer were attained. The outcome of the treatment was compared to the standard regimens for improvement of the current modern therapy<sup>(10-14)</sup>. The laboratory investigation included VDRL, HBsAg, HIV antibody, and concurrent STI was determined as well<sup>(15)</sup>. The categorical data was described in the number and percent.

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# Results

About half of the subjects, 51.2%, were in the age group of 21-30 years old. The most common site of the wart lesion was vulva of 67.2%, and followed by vagina, cervix, peri-anal, and vaginal respectively. The size was mostly less than 2 centimeters. The clients' characteristics are shown in Table 1. Of the subjects, 51 cases were pregnant.

The concurrent STI were 16 in 449 (3.5%): 15 cases of herpes genitalis, and 1 case of gonorrhea. The serological test for concurrent STI were VDRL positive 2 in 360 (0.56%), HBsAg positive 13 in 356 (3.65%), and HIV antibody positive 58 in 381 (15.2%). The cervical cytology was normal 181 in 332 (54.52%), whereas the majority of those remaining were inflammation and few cases with positive malignant cell.

The most treatment of choice was the application of topical trichloroacetic acid (50.1%), followed by podophylline (35.5%), electric cauterization (7.4%) and imiquimod applications (6.93%). The subjects 181 in 445 (40.7%) were completely cured, while 264 in 445 (59.3%) were slow response and need additional management. Among follow-up cases, there were 42 subjects who had recurrent genital wart (Table 2).

#### Discussion

The concurrent of STI in the present study is 3.56%, and it is relatively low in comparison with a UK study of 14%<sup>(15)</sup>. The giant condyloma acuminata, Buschke and Lowenstein tumor<sup>(16,17)</sup>, were not detected in the present study population. The subject of 264 in 445 (59.33%) were slow response and need additional management. Nearly 60% of cases required the more than one treatment modalities, and among follow-up clients about 10% had recurrent genital wart. The majority of treatment modalities aimed at wart clearance; the underlying HPV infection was not addressed. Hence recurrence following apparently successful treatment is not uncommon. Reported recurrence rates ranged from 0-91%<sup>(18)</sup>.

The aims of management should be carefully explained to the patients, as also the reason for treating the warts<sup>(19)</sup>. The major reason for treatment is for cosmetic purposes. In addition, the treatment may also reduce infectivity, although there is no overwhelming evidence to support this. It should be noted that HPV 6 and 11, the usual cause of genital warts, have little if any oncogenic potential and patients were reassured accordingly. Clients should also be advised regarding latency of HPV, and the partner from whom they acquired the virus may not be

Table 1.	Clients'	charac	teristics
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n = 449	Number (%)
Age (year)	
Less than 20	62 (13.8)
21-30	230 (51.2)
31-40	103 (22.9)
More than 40	54 (12.0)
Site	
Vulva	302 (67.2)
Urethra	32 (7.1)
Vagina	96 (21.3)
Cervix	87 (19.3)
Peri-anal	41 (9.1)
Number $(n = 442)$	
Single	81 (18.3)
Multiple	362 (81.7)
Size (centimeter) $(n = 429)$	
Less than 2	396 (92.3)
2-3	30 (4.3)
4-5	3 (3.4)
More than 5	-

Table 2. Modality of treatment and outcome

	Number (%)
Modality of Treatment $(n = 577)$	
Podophylline	205 (35.5)
Trichloroacetic acid	289 (50.1)
Electric cauterization	43 (7.4)
Imiquimod	40 (6.9)
Outcome $(n = 445)$	
Cure	181 (40.7)
Require additional management	264 (59.3)

their current partner. The clients presenting with genital warts should routinely be screened for other STI<sup>(20)</sup>.

In general, the management of genital warts is determined by the size, and anatomical site of the warts, whether the warts are keratinized or fleshy. No specific treatment is appropriate for all patients. In the present setting, the wide range of treatment available is reflection of the fact that there is no ideal management.

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# การรักษาโรคหูดหงอนไก่ของผู้ป่วยที่มารับการตรวจรักษา ณ หน่วยโรคติดเชื้อทางนรีเวช และ โรคติดต่อทางเพศสัมพันธ์สตรี โรงพยาบาลศิริราช

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**วัตถุประสงค**์: เพื่อระบุรูปแบบการรักษาโรคหูดหงอนไก่ในสตรี

**วัสดุและวิธีการ**: ทบทวนเวชระเบียนของสตรีที่เป็นโรคหูดหงอนไก<sup>่</sup>บริเวณอวัยวะเพศจำนวน 449 ราย ในช่วงเวลา 5 ปี ของคลินิกโรคติดเชื้อนรีเวชและคลินิกโรคติดต่อทางเพศสัมพันธ์สตรี ข้อมูลรวมถึงการกระจายของอายุ ประเภทของผู้ป่วย ตำแหน่งและขนาดทางกายวิภาคศาสตร์ การตรวจน้ำเหลืองระบุโรคติดต่อทางเพศสัมพันธ์ และวิธีการรักษา

**ผลการศึกษา**: ประมาณครึ่งหนึ่ง ร<sup>้</sup>อยละ 50.1 รักษาด**้วยการใช้ไตรคลอโรอเซติกเฉพาะที่ รองลงมาได้**แก่ โพโดไฟลิน ร้อยละ 35.5 สวนการจี้ด้วยไฟฟ้าและอิมิควิโมดใช้ไม่บ่อย สองในห้าหรือร้อยละ 40.7 หายขาด สวนที่เหลือจากนี้ ต้องการรักษาด**้วยวิธีอื่นเพิ่มเติ**ม