Management of anogenital warts in STD clinic, Kalubowila: A clinical audit

T.D.R.N Perera¹, N.Abeygunasekara²

Abstract

Introduction: Genital warts (GW) is the 3rd leading Sexually Transmitted disease (STD) in Sri Lanka which accounts for 23% of total reported STDs.

Objective: To describe the management of GW at STD clinic, Kalubowila in relation to the national guideline.

Methods: One hundred and thirty nine consecutive patient records during year 2016, with genital warts were analyzed using a data extraction sheet for auditable outcome variables adapted from the audit group of British Association of Sexual Health and HIV (BASHH).

Results: Out of 139 records, 86 were males and 53 were females. All the patients were managed according to the Sri Lankan national guideline. In almost all the cases (96%), site/location of the warts and extent/ distribution of the warts had been recorded using diagrams. However, the lesion was described in 50% of records. Out of female patients (53), cervical cytology was done in 31 patients (58%) and CIN 1 was reported in 2 cases. Pap smear had not been done in 40% of patients by the STD clinic due to pregnancy, total hysterectomy and availability of recent Pap test. All the patients were screened for HIV, syphilis and gonorrhoea. Trichloroacetic acid (90% TCA) and Cryo-theapy were the first line treatment among 75% and 25% of patients respectively. Three month treatment response rate was 74% while 9% did not show an adequate response and rest (17%) were defaulted treatment.

Conclusion: Almost all the patients were managed according to the national guideline and this should be continued. However, treatment response rate needs to be improved availing more treatment options.

Key words: Genital warts, clinical audit, STD clinic, Sri Lanka

Authors: ¹Dr T.D.R.N Perera, (MBBS, PgDVen), Registrar in Venereology, National STD/ AIDS Control Prgramme, No 29, De Saram place, Colombo 10, Sri Lanka. (https://orcid.org/0000-0002-1697-3355), ²DrN.Abeygunasekara (MBBS, MD); Consultant Venereologist, Colombo South Teaching Hospital (CSTH), Kalubowila.

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Corresponding author: ¹Dr T.D.R.N Perera, E mail: rachiniperera81@gmail.com,

Acknowledgments: Staff of the STD clinic, Colombo south teaching hospital, Kalubowila.

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Full article

Introduction

It was in 1984, Professor Harald zur Hausen, emeritus Scientist discovered the attribution of cervical cancer to Human Papilloma Virus (HPV) 16 and 18.(1) Ano-genital warts are caused by the Human Papilloma Virus (HPV) of which over 100 genotypes have been identified. The mode of transmission is most often by sexual contact but HPV may be transmitted perinatally and genital lesions resulting from transfer of infection from hand warts have been reported in children. There is no good evidence of transmission from fomites. Most anogenital warts are benign and caused by HPV types 6 and 11. Some lesions may contain oncogenic types associated with genital tract dysplasia and cancers. (2) Most have been linked with development of squamous intraepithelial lesions of cervix, vagina, vulva, penis or anus.(3)

Ano-genital warts are the 'tip of the iceberg' of genital infection with HPV, for example in the USA it has been estimated that there is an annual incidence of 1% of the adult population but many more people without warts have subclinical disease or latent infection.(2) Genital warts (GW), caused by HPV is the 3rd leading Sexually Transmitted disease (STD) in Sri Lanka which accounts for 23% of total reported STDs. In year 2016, there had been 2078 new GW patients were registered at STD clinics in Sri Lanka.(4) Systemic review and Meta analysis done in Europe documented the association between HPV causing GW and HIV acquisition. Having HPV infection will increase the risk of HIV acquisition.(5)

According to published literature, about different treatment methods, cryotherapy had 44%-75% clearance rate and trichloroacetic acid (TCA) 56%-81% clearance rate based on an 'intention to treat analysis'. (2)

Since there was no previous audit carried out at STD clinic Kalubowila on GW the ultimate goal of this audit process is to improve clinical practice by comparing accepted standards and outcome parameters which lead to better patient outcome. There were no records on GW audits among the published Sri Lankan literature.

The objective of this audit is to describe the management of GW at STD clinic, Kalubowila in relation to the national guideline. Outcome measures include; adherence to protocol (National

STD guide line 2009) to be 90% and percentage of patients with original wart clearance at 3 months to be 90%.(6)

Methods

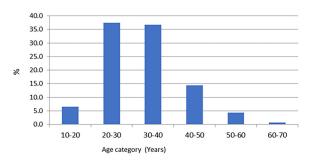
A descriptive record based study was done at STD clinic, Kalubowila. One hundred and thirty nine (139) patient records during the year 2016 were selected. Data extraction sheet for auditable outcome variables was adapted from the national audit group of BASHH. They have developed a questionnaire to assess the management of genital warts. The variables were adapted from that questionnaire which included, adherence to National STD guide line, recording of GW using diagrams, proper description of warts, and the treatment offered, offering of cervical cytology and outcome at 3 months.

Data analysis was done using SPSS version 21. Descriptive statistics was used. Adapted variables were compared with the national guide line for the management of STD published in year 2009.

Results

Majority (74%) of patients belong to 20-40 year age group. Mean age of the sample was 31.49 years with a standard deviation (SD) of 9.4. (Figure 1)

Figure 1: Age distribution



Out of 139 records, 86 were males and 53 were females while all the patients were managed according to the Sri Lankan national guideline. Majority (83.5%) of them was heterosexuals, 8.6% were homosexuals and 6.5% had bisexual behavior.

In almost all the cases (96.4%) site of the warts and extent of the warts were recorded using diagrams. But the nature of the warts was described in 50% of cases.

All the patients (100%) were screened for HIV, Syphilis and Gonorrhoea. Out of female patients (53), cervical cytology was done in 31 patients (58%) and CIN 1 was reported in 2 cases. Pap smear had not been done in 40% of patients at the STD clinic due to pregnancy, total hysterectomy and availability of recent Pap test results. Some patients declined. (Table1)

Table 1: Cervical cytology

| Cervical cytology | Percentage |
|-------------------------|------------|
| Offered and accepted | 58.4% |
| Offered and declined | 1.9% |
| Already done within 5 Y | 9.4% |
| Not offered | 30.3% |
| Total | 100.0% |

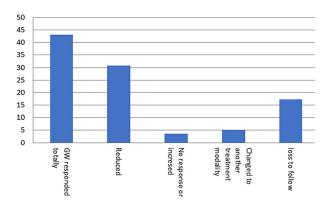
Trichloroacetic acid (TCA) and cryotherapy were the two main available treatment modalities at the clinic. TCA was the 1st line treatment among 73% of patients. (Table 2)

Table 2: Treatment modalities

| | First line | Second line |
|----------------------|-------------|-------------|
| Treatment Modality | treatment % | treatment % |
| | (n=139) | (n=32) |
| Trichloroacetic acid | 73 | 18.7 |
| Cryotherapy | 18 | 68.8 |
| Podophyllin | 0.7 | 0.0 |
| Surgical referral | 0.7 | 9.5 |
| Imiquimod (Aldara) | 0 | 3.0 |
| Refuse treatment | 7 | 0.0 |

At the end of 3 months, 74.1% responded to treatment, 17.3% defaulted and 8.6% did not show any response to treatment. (Figure 2)

Figure 2: Clearance of Genital warts by 3 months



Mean number of clinic attendance by a patient was 7.7 times with the mean duration of 4 months. Health education had being given to 99% of patients and condom promotion was done in 97%.

Discussion

Out of 139 records, 86 were males and 53 were females while all the patients were managed according to the Sri Lankan national guideline. Majority (74%) of patients belong to 20-40 year age group. Majority (83.5%) of them was heterosexuals, 8.6% were homosexuals and 6.5% had bisexual behavior. This demographic profile is compatible with the national figures in the annual report in which majority of the GW patients were males and highest trend was seen among more than 25 year age group.(4)

Recording of lesion on a diagram or a genital map at each visit is important. Providing a visual record of the nature of the GW, number of warts and distribution is useful in assessing the response to treatment.(2) Almost all cases in this audit, the site of warts and extent of the lesion was described using the diagram in the patient record. However, nature of the warts was described in 50% only.

All the patients (100%) in the study group were screened for HIV, Syphilis and Gonorrhoea and all the patients were managed according to the National guideline.

Out of female patients having GW, cervical cytology was done in 58% of cases and CIN 1 was reported in two cases. It was not done in 40% due to pregnancy, total hysterectomy, and availability of recent Pap smear reports. During year 2016, out of all pap smears done in STD clinics in Sri Lanka CIN prevalence was 1.8%.(4)

National guideline for the treatment of genital warts was designed in year 2009 for routine use in a busy STD clinic. It provides an overall management plan and variety of recommended therapies. Out of them Kalubowila STD clinic used trichloroacetic acid (TCA) and cryotherapy as the main treatment options. As first line treatment, TCA was used and Cryotherapy was used as the second line treatment. Choice of treatment was decided on number of warts and the site of warts. During the first audit done at the Genito-urinary-medicine (GUM) department at Leeds, UK revealed that treatment for GW was found to be unselective and had a poor out come without proper management protocol or guide line.(7) As a consequence, guidelines were devised. After the development of the new guideline second audit was done and there was an increase in the initial use of cryotherapy and trichloroacetic acid leading to a significant increase in the response to the treatment. Clearing of warts after 3 months increased from 66% to 92 %.(8)

In this audit, at the end of 3 months out of 139 patients 17.35% defaulted. Out of the 114 patients followed up to 3 months poor response rate was observed only in 8.6%. About 91% of patents responded well to treatment at end of 3 months. In majority of the patients, warts clearance by 3 months was higher than the expected out come by BASHH auditable outcome measures (90%). (6)

Conclusions

Almost all patients were managed according to the national guideline and need to continue the same practice. In majority (96%) of cases diagram has been used to record the extent and site of warts which was a good practice. However, documentation is deficient in describing the nature of lesions. Majority of the patients were offered first line treatment according to national guideline. It is time to make more treatment options available as only two main methods were available.

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