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# Warty Growth in the Anogenital Area in a Child - Discussion.

**S.Soundarya[1*], Dr.M.S.Srinivasan[2], Dr.P.Vignesh Shivaraman[3]**

[1]Assistant Professor, Department of Dermatology,Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education (CARE), Kelambakkam,Chennai, Tamil Nadu

[2]Professor and HOD,Department of Dermatology,Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education (CARE), Kelambakkam, Chennai, Tamil Nadu

[3]1st year Post Graduate, Department of Dermatology,Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education (CARE), Kelambakkam, Chennai, Tamil Nadu

**Corresponding Author*:**
Dr.S.Soundarya,
Assistant Professor,
Chettinad Hospital and Research Institute,
Kelambakkam, Chennai, Tamil Nadu
E-mail:soundarya1963@gmail.com

## ABSTRACT

Anogenital area is of clinical importance in dermatological practice due to the psychological stress and discomfort that it exerts in the patient's life.Recognition of the various conditions affecting this area is essential for any physician to diagnose and treat it appropriately.Here, we present a case with protruding lesion on the anogenital region in a 10 year old school going child highlighting the importance of proper diagnosis, differential diagnosis and treatment options.We describe a case of anogenital wart in a child highlighting the necessity for proper historyof sexual abuse and highlighting the necessity for proper sex education and counselling in pediatric age group and difficulties arising in eliciting a through history from a child.This calls for the Multidisciplinary approach that is required when treating a patient of the pediatric age group especially to identify signs of child abuse and provide appropriate counselling.

## KEYWORDS

Anogenital Warts,Verruca Vulgaris,Condyloma acuminata,Child abuse.

**INTRODUCTION:** Human papilloma viruses (HPV) is the most common sexually transmitted infection. Diagnosing a case in the pediatric age group with cutaneous infection in the anogenital region is a challenge for the treating physician. Each case requires extensive history taking and examination to arrive at the correct diagnosis.HPV affects all the age groups but it is seen more in young people who are more sexually active. HPV 6 and 11 are most common high risk causation for warty growths in the anogenital area.Clinically, HPV may manifest as anogenital warts, also known as condyloma acuminata.The incidence of anogenital warts in children has increased in recent decades[1][2].According to the World Health Organization, child abuse is defined as the abuse and neglect of all children younger than 18 years and includes all types of physical,

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psychological, and sexual abuse, as well as neglect and commercial exploitation[3].A lesion in the anogenital region calls for various associated diseases and causes which need to be differentiated accordingly to arrive at the correct diagnosis and give the appropriate treatment required.

## CASE REPORT

Here we present, A school going, 10 year old female patient who had come to the Dermatology Department with presenting complaints of protruding lesion in the anogenital area for the past 8 months.It is asymptomatic and slow growing in nature,no history of itching,discharge,ulceration ortrauma and there was no history of similar lesions found elsewhere over the body especially fingers.The informant[Mother of the patient]denied any sexual abuse and no associated family history.

**Fig.1. Clinical photograph of the anogenital region demonstrating the protruding lesion with few satellite lesions near the vaginal area.**

On examination, a large 7 X 3cm verrucous,grey to dark brown coloured mass with rugae was seen over the perianal region extending in a linear manner to the Labia majora shown in **fig.1.** There were no excoriation marks seen. Serological tests were sent and it came back negative.Mantoux was done and was negative. The lesion was excised and was sent for histopathological examination.

Histopathological examination: Revealed epidermal acanthosis. The surface has an undulated rounded papillomatosis rather than the spiked verrucous hyperplasia seen in verruca vulgaris.High power examination[**Fig.2**] of condyloma acuminatum revealed vacuolated keratinocytes with shrunken nuclei (koilocytes) in the upper layers of the epidermis

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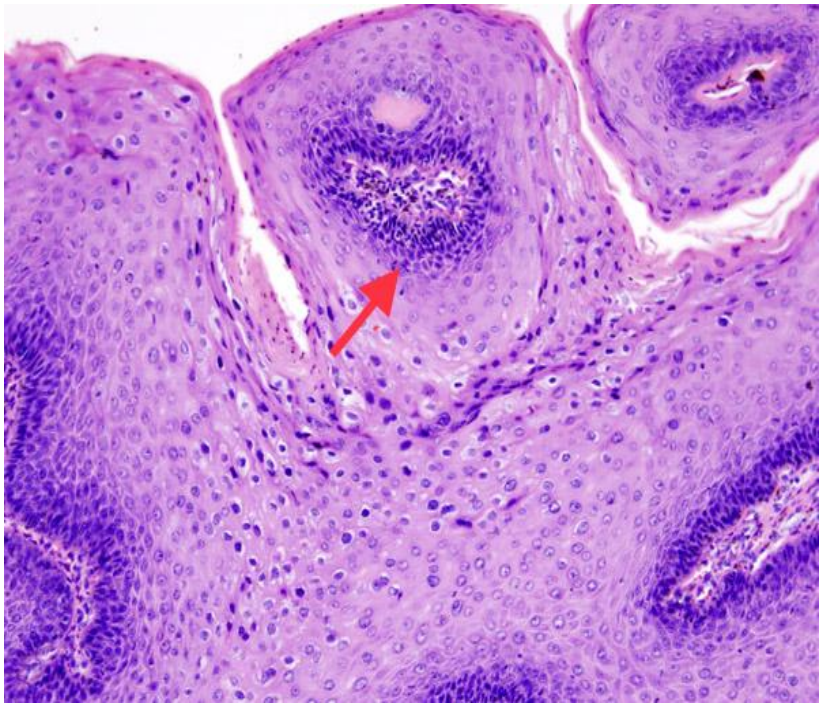

**Fig.2.High power examination of condyloma acuminatum showing vacuolated keratinocytes with shrunken nuclei.**

Treatment : The patient was counselled about any sexual advances by strangers or by close relatives and to take notice of such situations , report to the parents or guardians in that event.The lesion was excised in toto and it was sent for Histopathology examination and it was found to be consistent with condyloma acuminata.The patient lost follow-up after that.

## DISCUSSION

Genital warts have a high infectivity. The thinner mucosal surface is presumably more susceptible to inoculation of virus than thicker keratinized skin.It is a commonly diagnosed sexually transmitted infection in adult age group[4]. It is uncommon in pediatric age group but whenever encountered the possibilityof sexualtransmission needs to be evaluated.The child could introduce the HPV from a wart originating from the fingers through autoinoculation by herself or by the perpetrator.[5]

In sexual transmission, there may be evidence of molestation and nail marks found in the anogenital region[6]. It is difficult to elicit the proper history from a child because he/she may be unaware of the “good touch and bad touch” [**Fig.3**] situations from an perpetrators be it a stranger or a well known family relative.A child who has been abused might be afraid to tell anyone about the incidentand might show changes in behaviour such as anger, aggression,change in school performance and unexplained fear may be noted.Unexplained Bruises or burns may raisesuspicion of physical abuse.

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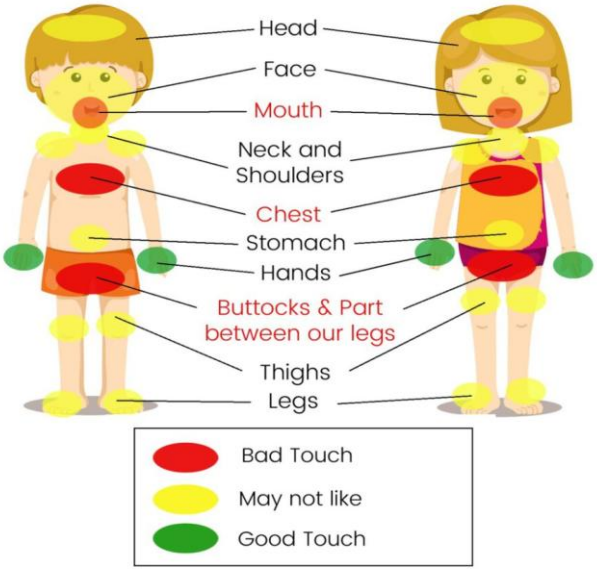


**Fig.3. Areas of good touch and bad touch.**

Condyloma acuminata are often asymptomatic, accompanied with or without discomfort or discharge. The typical lesion is soft, pink, elongated and sometimes filiform or pedunculated[7].Thecommon sites of occurrence include frenulum, corona, glans penisand scrotum in men, and the cervix, vagina, posterior fourchette and vulva in women.

The caretaker and people who are spending time with the child need to be called for questioning and a detailed history should be elicited and also should be examined for similar lesions in their body. While investigating a lesion in the anogenital region the differential diagnosis [8,9]must be taken into account. Here in **Table No.1**are the lists of diseases associated with verrucous lesions occurring in the anogenital region.

**TABLE NO.1**

| **Differential Diagnosis for Verrucous Anogenital Lesions** |
|---|
| • **Normal structures like vestibular papillomatosis, pearly penile papules and fordyce's spots can also be confused with warts**<br>• **Angiokeratomas**<br>• **Buschke–Löwensteintumour**<br>• **Condyloma lata**<br>• **Condyloma acuminata**<br>• **Deep fungal infections**<br>• **Epidermal nevi**<br>• **Intestinal parasitic infection**<br>• **Koebner's phenomenon**<br>• **Lupus vulgaris**<br>• **Molluscum Contagiosum**<br>• **Seborrhoeic keratosis**<br>• **Tuberculosis verrucosa cutis** |

In **Table No.2**, the different serotypes of HPV have been enumerated.

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**TABLE NO.2**

| ANATOMICAL MANIFESTATION | COMMON SEROTYPE |
|---|---|
| ● **Anogenital Cancer**<br>● **Oropharyngeal Cancer**<br>● **Nasal inverting papillomas**<br>● **Oral warts**<br>● **Respiratory papillomatosis**<br>● **Plantar warts** | ● **16,18,31,33,35,26,73,72**<br>● **16,18,31,33**<br>● **6,11,16,18**<br>● **2,6,11,57**<br>● **6,11,16**<br>● **1,2,7,4,10** |

The duration can be few weeks to months and various treatment modalitiesinclude topical treatment with Podophyllin, podophyllotoxin, imiquimod (5%) cream,cryotherapy, surgical excision, laser, photodynamic therapy, interferons.[10]The topical application of podophyllin, an antimitotic drug is the most commonly used treatment modality[11].

Prevention can be done by getting vaccinated with the HPV vaccine[12] ( Gardasil &Cervarix).Gardasil is approvedforfemales of 9 to 26 years of age and protects against the development of cervical cancer. It is best to get the shot before the start of sexual activity. The vaccine consists of a series of three shots. Usage of Condoms can prevent further spread of infection and abstinence is the best way to avoid HPV.

## CONCLUSION

In the suspected diagnosis of Condyloma acuminata in child, a multidisciplinary approach is required especially when sexual abuse is suspected.Sex education and counseling needs to be advised regarding the improper sexual advances from the same peer group or a stranger or family group. Many of the sexual abuse victims don't have any identifiable lesions. This makes it further difficult to come out with the exact cause. The dermatologist can collaborate with pediatrician, psychiatrist and gynaecologist to deal more effectively with sexual abuse victims of the pediatric age group. Proper examination in relation to abuse-associated findings and screening for co-existent sexual diseases should be done.The doctor should ask questions either verbally or by means of a questionnaire regarding any abnormalities exhibited by the child ( any signs of violence).The parents and caretakers need to be called for questioning and appropriate abuse related history should be elicited.Sex-education and counseling is the most important aspect of the follow up in the victims.

## PATIENT CONSENT

The patient's legal guardian provided written consent to publish details and photographs of this case.

**CONFLICTS OF INTEREST:** Nil

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