

INCIDENCE OF INJURIES BY PAPILLOMA VIRUS HUMAN IN THE UNIVERSITY YOUNG UAEM VALLE DE CHALCO

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ABSTRACT: *The present study aimed to determine the incidence of lesions caused by the human papillomavirus (HPV) genitals from University, studying both genders of a University Centre of UAEM, was performed using the techniques of colposcopy and peniscopy with contrast solutions. The age of the studied population is 25.5 years, finding an incidence of 52.5% for women and 30.6% for men, which indicates that it is essential to carry out studies of sensing opportunity at the beginning of sexual life regardless of age, it is important to point out that it is the population with the clinical manifestations to the conduct of the study, has an average of 4 sexual partners and there is a large percentage that is contaminated and has not been detected the virus, thus increasing the spread of HPV.*

KEYWORDS; the human papilloma virus, colposcopy, peniscopy.

INTRODUCTION

Due to these figures, there has been the interest to investigate the incidence of human papilloma virus, since the organism is the main causative agent of cervical cancer; with respect to these inquiries, Jimenez concerns that in recent years has been observed an increase in the incidence of infection which is related to changes in sexual habits. The author, makes mention of a study conducted in the India in 1996 where reported that 2 out of 3 people had sexual contact with a partner (a) that has genital warts; Another study carried out in that country found that 70% of patients evaluated had infection with high-risk HPV types 16 and 18, coming to the conclusion that this virus play an important role in oncogenesis, where the virus-related cancer represents 3-4%. For the year 2001 is a study in which it was determined that 86% of the sample were positive to HPV, and that the clinical manifestations which predominated were warts and laryngeal papillomas. The isolated virus 68% were of origin genital, noting most frequently type 6 and 11, (Jiménez, 2005).

In regards to the higher or lower prevalence of STIs among countries and population groups, the World Health Organization (who) has pointed out that: "any figure around the world, can hide the difference in incidence and prevalence that exist in different regions and countries; even in a

specific region, the prevalence could be high in certain high risk groups or the population in general". During the period 2000-2001, Sanchez-aleman et al. They conducted a cross-sectional study, students of the Autonomous University of the State of Morelos; using a sampling by convenience in students in 7 faculties. The analysis considered only to individuals who had started their sex life at the time of the study, 71 men and 123 women. The prevalence of HPV in this population was 14.4%; the frequency of infection was higher in women than in men: 17.9 versus 8.5%, respectively, (Sanchez, 2002). Various studies speak of the relationship that arises between human papilloma virus infection and the development of cancer cervical (CaCu), since, as mentioned earlier, this cancer is associated with a high mortality in developing countries, such is the case of Mexico; at the national level the Caçu ranks first among malignant tumors in female population, with a mortality rate of 18.3 per 100 000 women at age of 25 years and more. Pulled Gomez and colleagues point out that from the 80's has been identified to HPV as a necessary, but not sufficient cause for the disease, (Tirado, 2005). Walboomers (2000), cited in shot Gómez (2005). Concerns that 99.7% of cases of Caçu is associated with the presence of the human papilloma virus. The incidence of HPV are concerned, a Panamanian study of the Memorial Institute for health studies determined the presence of the virus in a youth population of contraception clinic. Reporting that 150 were analyzed samples, of which the 47.3% turned out to be positive to HPV. (González, 2004). Inquiry sources point out that the risk factors for contracting the human papilloma virus are multiple and divided into socio-economic, biological and cultural. Among them include: multiple sexual partners without protection, age of onset of sexual relations, concomitant sexually transmitted infections, family history, smoking and immunosuppression. Solmar Ortunio (2009) points out that other factors influence significantly the prevalence and incidence of human papilloma virus is the accurate and timely information that the population is about. This author in his work entitled knowledge about the human papillomavirus in nursing students, describes the lack of knowledge about STIs is a reality that is concerned. In Toronto, 87% of the students claimed to have not heard about HPV and the women informed about the Pap test, only 39% of which had sex knew that they had to undergo this examination, (Sol-Ortunio, 2009). In Maracaibo, Venezuela became an inquiry into fifth year of college students, where it was found that 38% of the population was sexually active and did not use any protection; only 30 per cent had knowledge, but this was insufficient, on the prevention of STIs. According to Sol and collaborators, it is essential to assess knowledge of the population in relation to the subject, because in recent years has been an increase in the onset of sexual activity at an early age, becoming a group of risk for STIs; in Anzoategui, another Venezuelan State, was selected for the research a sample of first-year students of nursing at the University of Carabobo in order to determine the knowledge about HPV according to the age, origin, number of sexual partners and to determine knowledge of HPV in relation to the development of Caçu, form of transmission, consequences, organs affected and prevention measures found that 47 percent were sexually active; being the average age of onset of sexual intercourse from 15 to 16 years (relevant point by the time of exposure and risk to infection by HPV), (Sol-Ortunio, 2009). Previous statistics that reflect poor knowledge about HPV are significant because there is a high association between the limited information on the development of the infection by this virus and risk practices that contribute to an increase in its incidence.

METHODOLOGY

Cross-sectional qualitative study of field, the study population is the student community of the University Centre of UAEM Valley of Chalco, the sample was taken through a sampling by convenience, where the selection criteria included college students, over the age of 18 years, who had begun their sexual life, that accept the participation to the study and previously reported to sign a letter of consent. Equipment and procedure provides information about the procedure for detection of HPV, as well as the benefits of the study. MTV 32K9HN model was used a team of high-definition, mark DFV, model CP-M1250, colposcopy and a camera, and through his connection to the computer equipment was capturing images of the external genitalia. The peniscopy procedure consists of observation detailed anatomical structure of the penis and its annexes, valuing the distribution of pubic hair, symmetry and colour, the presence of skin lesions, warts or Condyloma, differentiating them from the presence of papules Pearly characteristics of shape, distribution and location. Subsequently applies acetic acid 5% to wrap the penis during a 5 minute period, to then observe with the microscope to detail if they arise or not injury acetopositivas. Colposcopy procedure involves the detailed observation of external genitalia, as well as the cervix, through a vaginal Speculum, expanding the images seen through a special lens. 3 substances are applied sequentially: saline, acetic acid 5% and 25% lugol's solution. Studies are performed in approximately 20 to 25 minutes. Time during which a report is filled. Completing the is to inform the user about the findings. During the proceedings, there was also an anamnesis with the purpose of obtaining General information, personal and family history, risk factors for contracting HPV, and finally finds colposcopy or peniscopy, as the case may be. Subsequently, the results were analyzed using the Statistical Package for the Social Sciences (SPSS) for statistical data.

RESULTS

College students are a group between 18 and 25 years of age, this stage of life is defined as a young adult and biological changes are initiated in early stages, but in the youth where there are important psychological changes and new experiences with regard to sexuality (Sanchez-German, 2002). Sexually transmitted infections are one of the most common diseases in the world, according to the World Health Organization (who) "one in a hundred people attend consultation at least once a year due to an STI". According to Solmar Ortunio (2009), one of the main problems of these infections is that the majority of carriers are unaware of its existence, and therefore a large part is not diagnosed (Solmar Ortunio, 2009). Colmenares et al. claim that millions of sexually active people in the world currently have sexually transmitted infection; one of the most common is the human papilloma virus infection and contradictorily, one of the least known, said virus is closely related to development of precancerous lesions. For this study, the sample included a total of 87 students from the Centro Universitario UAEM Valley of Chalco, of which 65% is female, while 35% male. General data, as well as personal and family history, risk factors were collected for HPV, and finally scans of colposcopy or peniscopy; find the following information: the average age for women of 25 years with a standard deviation of 7.3. A 72.5% are married, 19.6% single and a 5.9% in free union. 64.7% says the intake of alcoholic beverages at different frequencies, in terms of the consumption of tobacco is present in a 21.6%, an 11.8% refers to having some type of substance consumed psychoactive. In terms of gynecological history, was obtained: the average age of menarche was the 12.3 years, the age of onset of sexual

intercourse to 17 and the number of sexual partners 3, with a standard deviation of 1.2. 17.6% concerns a history of cervical cancer in relatives. To inquire about contraceptive method used was obtained that: in higher percentage the condom with a 44.4%, followed by 26.7% who use condoms and some other method; 20% prefer hormonal methods, 2.2% done the OTB (Bilateral tubal obstruction), while a 6.7% none of the above. Of the 71.1% who used condom; on the Likert scale: a 22.2% refers to never use condoms, 37.8% rare time, 13.3% used it at one time, while the 17.8% and 8.9% mentions that always and almost always respectively. With respect to the knowledge they have on sexually transmitted infections in their partners: the 62.2% refers to ignore if one of their partners have had an STI, a 33.3% ensures that they have not had them, while a 4.4% says that if it has had partners with any sexually transmitted infection.



Figure 1. Cervix of normal appearance.

Finds of in colposcopy: in a 52.9% presents the intraepithelial lesion of low grade, 13.7% nonspecific inflammatory alterations, while a 25.6% reported unchanged, while 7.8 are other findings. During the procedure, apply a series of solutions of contrast, with the purpose of revealing whether or not the presence of HPV. In Figure 1 is shown in normal-appearing cervix. In the figures 2 and 3 demonstrates the application of 5% acetic acid and lugol's 20% respectively, where the presence of the human papilloma virus is detected.



Figure 2. Reaction acetopositivo, (own source).



Figure 3. Application of lugol's, where you can see typical reaction by the presence of HPV, (supply own).

The average age in men is 26-year-old, with a standard deviation of 8.3. A 13.9 per cent are married, 83.3% single and a 2.8% in free union. 77.8% says the intake of alcoholic beverages at different frequencies, in terms of the consumption of tobacco is present in a 30.6%, a 30.8% refers to having some type of substance consumed psychoactive. In terms of the history of sexuality: the age of onset of sexual relations to 16 and the number of sexual partners, 5, with a standard deviation of 2.7. 25% means cancer history in immediate relatives. 81% concerns condom use; on the Likert scale: a 18.2% concerns that never uses condoms, rarely 21.2, the 24.2% use it ever, while 18.2% mentions that always and almost always respectively. With respect to the knowledge they have on sexually transmitted infections in their partners, the 60.6% refers to ignore if one of their partners have had an STI, a 27.3% ensures that they have not had them, while a 12.1% says that if it has had partners with any finds sexually transmitted infection of in the peniscopy: in a 30.6% low grade intra-epithelial lesion presents 2.7% are other findings (Pearly penile papules) and 66.7% unaltered. HPV lesions, are classified according to the degree and type, according to this sample says 27.8% injury grade 1 characterized by measuring less than 5 cm. In a 19.4% present lesions are type A (includes all that injury that can not be recognized macroscopically, and be it after be done staining using acetic acid); While the 8.3% of type B includes all the injury that can be recognized macroscopically and which, moreover, is acetopositiva. The average age in men is 26-year-old, with a standard deviation of 8.3. A 13.9 per cent are married, 83.3% single and a 2.8% in free union. 77.8% says the intake of alcoholic beverages at different frequencies, in terms of the consumption of tobacco is present in a 30.6%, a 30.8% refers to having some type of substance consumed psychoactive. In terms of the history of sexuality: the age of onset of sexual relations to 16 and the number of sexual partners, 5, with a standard deviation of 2.7. 25% means cancer history in immediate relatives. 81% concerns condom use; on the Likert scale: a 18.2% concerns that never uses condoms, rarely 21.2, the

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Figure 4. Display of external genitals, of normal appearance, (own source).

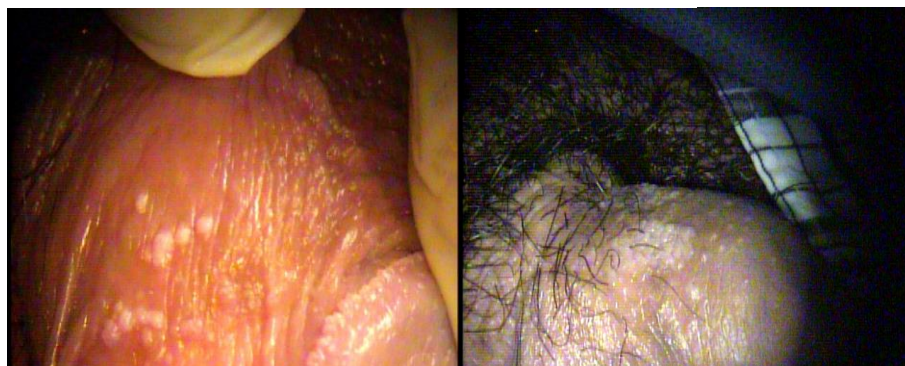
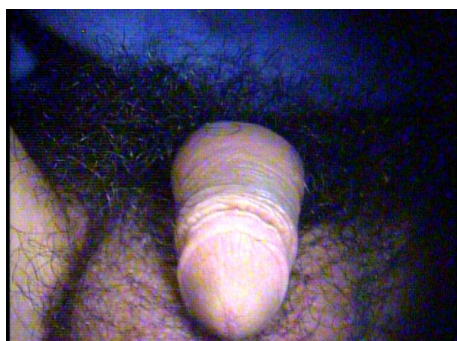


Figure 5: HPV lesions. Type A, which is displayed after the application of acetic acid 5%, (own source).



Figure 6: HPV lesions. Type B (own source).



Figure 7: HPV lesions. Type B (own source).

DISCUSSION

Human papillomavirus (HPV) virus is the highest incidence STI; It spreads through skin-to skin, biological fluids during sexual play and coital Act contact, it is asymptomatic in the early stages and often imperceptible to the naked eye, which leads to be detected until it is advanced infection, demonstrating in benign and malignant lesions mainly in the anogenital area which in late detection can lead to death , (Hernandez Carreño, 2012). It infects the epithelium of the skin and mucous membranes; manifested dermatologically tested as warts, flat lesions, lesions papilliform though they may be latent or subclinical that only be evidenced by specific tests: test of acetic acid 5%, (Potenziani B, 2002). The frequency of HPV in young women is high: up to 50% of adolescents and adults acquire the infection by human papilloma virus in the first 2-3 years of having an active sex life; of these women, up to 25% of people who become infected with HPV develop squamous epithelial lesions of low grade, (Solmar Ortunio, 2009). The relevance of this infection is the impact that has on the health system, the high rate of morbidity and mortality for Cervical Cancer (CaCu) and to date is has failed to stop the deaths by this pathological entity. Learn about the incidence of HPV has high impact in the prevention of the Caçu; However, this research seeks to a comprehensive understanding of health as a couple and not only of women, since it is erroneously believed is the only one who should be treated. HPV early detection allows treatment and remission without greater consequences as the development of cancer ano-genital. Approximately 65% of sexual partners of women with cervical dysplasia have HPV infection; much of these infected men will have no clinical signs suggesting disease, being responsible for the spread of the virus (Guzmán, 2005). The importance of this study lies in that so far, we did not find scientific literature that report the preparation of diagnostic studies in the male population of preemptively, but rather when he found the presence of virus the couple; in search of information regarding it is possible to find some websites that mentioned in way superficial and non-specific detection of HPV have made, however there are no national or State reports that indicate the incidence of the virus or some wide description; However, when this research is a 30.6% of the studied men where manifests the HPV infection after performing the peniscopy. With respect to this issue should mention that there are constraints that significantly impede their treatment, in the first instance: the little information that is on the presence of HPV

in the male population; There are very few scientific texts that address such themes, likewise it is widely unknown what are the procedures for detection. Ibarra Muñoz et al. (2012) indicate that in contrast, with the wealth of data concerning HPV infections in women, little is known about this infection in men, which complicates the understanding of the epidemiology and clinical aspects of the viruses in this genus. Because of its high prevalence and high rate of infection, the spread of HPV is common among sexually active people; men can be considered important diffusers of this infection to women (Muñoz, 2012) in the search so far not found any site responsible for the detection of human papillomavirus in men as opposed to the multiple diagnosis focused on the female population centres. Coupled with another constraint important: due to predominantly cultural factors, there is much resistance by men to undergo diagnostic tests; manifest modesty, and some even manifest it is unnecessary, or do not believe it possible to have any STIs. Another limitation in detection and treatment of human papillomavirus in the sexually active population is the low impact that the strategies used so far have been. Garcia (2014) means that although at present new alternatives are developing both as a therapeutic and primary prevention (vaccines against HPV); control programs have not worked as expected, since they have estimated about 231,000 deaths per year, 80% of which occur in developing countries, posing as the second leading cause of death by cancer in women. In Mexico, since 1974 there is a national program of early detection of Cancer (DOC); to this day, has been difficult to establish and maintain the screening program effective, due to low coverage, which is hardly the 46.9%, and low standards of quality, despite its normative character. Likewise, the author points to the presence of various factors that hinder the effectiveness of existing programs; among those mentioned: individual behavior, social conditions, deficiencies in health services and deficiency on the accurate and timely information among others, (2014 Garcia). This statement is attached to the situations that were observed during the performance of diagnostic procedures in the University. An example of this is the strategy used by the Mexican of the Social Security Institute where tests of vaginal cytology method diagnostics that examines the cells of the cervix, they are only older than 25 years, after a long period of waiting; It is important to note that according to Welti, as well as the results of this work, the beginning of sexual life in college students is on average 17 years (Welti, 2005); relevant data by the previous statement where it is indicated that you tests the HPV screening are performed 8 years later in this institution, period during which there is a high chance of developing the infection by the virus and even cancer given that the sexually active population presents that risk from the onset of sexual intercourse. This is not to mention that not all the population is subjected to diagnostic tests, largely due to the low culture of prevention in the country. Should be noted that in the present investigation was found at these ages injury by human papillomavirus LIEBG (Intraepitelial of low-grade lesion) in the 52.9% of the women and the 30.6% in men.

Moreover Sola, in 2012, reports a study about the habits of sex life of men and women, whose objective was to determine the number of sexual partners on average having young people in Mexico. The study included a sample of a thousand people and the average number of sex partners considering both genders was 7. The Mexicans answer the question of how many sexual partners have had throughout his life threw the following percentages: 49% of 1 or 2 couples, 33% of 3 to 5, 11% of 6 to 9 and 7% of 10 to 14 couples, (single, 2012). For these same data is in the Center University UAEM valle de chalco, the average number of sexual partners is of 3 women and 5 men; with a minimum of 2 and maximum of 10. The factors mentioned above:

beginning of sexual life, number of sexual partners, and the lack of effectiveness in timely detection of human papilloma virus programs play an important role in the spread of HPV, raising this risk in up to a 90%. The University population represents a target for action on early detection, as well as also implement educational strategies in the sexual sphere; Since such strategies have been focused on an open population without considering the particularities that represents a University community, since this has some characteristics.

CONCLUSIONS

To address issues of prevention in health, there are multiple factors that hinder is actually occurs and meets its purposes; These include little preventive culture in the country; coupled with lifestyles that increase the risks of contracting sexually transmitted infections, of any type, and specifically for the human papilloma virus; the most important thing that we found: of the total population, there is a 70%, 26% smoking and alcohol consumption and are the main risk factors for contracting HPV, agreement to the Norma Oficial Mexicana NOM-014-SSA. Also referred to as the age of onset of sexual relations, which was on average the 16.5 for students of the University's Center of UAEM, of which only a 76.5% used condoms and the 61.4% unknown if any of their sexual partners has had ITS. With these data is clear that the population is vulnerable, and that if it is true that mortality and morbidity by HPV has been decreasing in 70% (Hernández & al., 2013) is necessary to work in more effective detection and treatment strategies to engage and make stewards youngsters of preventive health care. With the experience gained from this study, it is vitally important first contact young people with health staff responsible for carrying out screening procedures, since the patients themselves have expressed concerns and fears; This first contact with the diagnostic procedures it will depend in great measure if you continue or not with subsequent revisions. It is of utmost importance education for sexual health, guidance on preventive measures and forms of transmission of HPV since the majority of young people believe that if they do not present clinical manifestations, there is contagion; It should be clear that the strategies implemented by the institutions of public health in Mexico carry out important work in terms of the reduction of Cervical Cancer, as evidenced by the statistics, however still work on specific measures for the University population. Determine the incidence of injuries by the human papilloma virus allows a suitable treatment for the health-disease process; and so we can make the timely detection of virus of the human papillomavirus in the students of the Centro Universitario UAEM Valley of Chalco, through colposcopy and peniscopy procedures, it is essential that young people understand that their health care is paramount and that while it is true, so far only known from institutions focusing on the female population; men play an important role in the spread of HPV and they can also undergo diagnostic methods that have the advantage of being less invasive.

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