## Human Papilloma Virus - H.P.V. condyloma

## Current studies in diagnosis, treatment and prognosis

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Summary: Since 1982, in the Republic of Panama, we evaluated 5,400 women who showed the oncological risk (R.O.) in 59% and in which the participation of pure or associated HPV was 87.6%. The incidence of the HPV in our female population is 52% with a prevailing age of 20-40 years.

Key words: R.O. - HPV dysplasia cancer.

## INTRODUCTION

During eleven years of study, in our country we have found a situation rather alarming due to the high incidence of oncological risk in our female population with a prevailing age of 20 to 40 years. It is no coincidence that in this population, which is polymorphous as a whole, the incidence of HPV is 52%.

The increase of HPV infection is not only occurring in Panama, an underdeveloped country, but is also an important topic in industrialized countries like the USA, France, Spain, Italy, the Netherlands and especially in England, where we found the most modern and sophisticated studies on this matter.

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We know that in England studies have shown that more than 50% of the female population had HPV infection and a great majority did not have any symptoms or signs. Others have determined this infection to be a sexually transmitted disease, which is the most common one at the present time.

International numbers indicate an upward tendency with a mean value of 13%. In Italy this number is 29.6% and in 1993 the national registry showed an incidence of 52%.

The diagnosis of condyloma, in a certain form, produces great concern in the affected population. Sometimes we reach extreme degrees such as the identification of an infection as cancer which produces a stress condition, poor quality of life, often leading to making serious mistakes and to using surgical methods such as hysterectomy.

On the other hand, we sometimes find carelessness by physicians who consider the infection as something trivial and give advice as if it were nothing, or say: "There is nothing to worry about" or "this is incurable".

In the relation between condyloma infection and dysplastic and neoplastic pictures, values are associated, and range between 5 and almost 100%, according to well documented studies published in international medical literature. It is worth while mentioning that when there is a major concern of dysplasia, there is also a major affinity with HPV infection and even more so when there is cancer of the cervix.

However, in most of these cases HPV infection with early detection due to inquiry or screening, was found to have no affinity with dysplastic and neoplastic pictures (82%). In the remaining 18% we found the infection associated with dysplasia in 14% and with cancer in 4% of cases.

Our prevention system, which is still based on exfoliative cytology, or "paptest", prevents an early diagnosis in numbers which range from 40 to 60%, that is, as false negatives, and with serious repercussion of omission, thus allowing the progression to a pathology and therefore with late diagnosis.

At the present time, colposcopy allows us to eliminate a large number of these false negatives - we even double check the diagnosis by means of direct biopsy guided by the same colposcopy. This allows, in addition to diagnosis as to pathologic grade, guided treatment to the affected area and consecutive controls of colposcopy and colpocytology.

Our financial limitations do not allow us to perform studies of molecular biology, which would have greater sensitivity in determining condyloma infection ranging from 2.5 times higher and a combination of certain methods (PCR and dbh) to 9.5 times higher which, from the point of view of incidence, would give us probably alarming numbers from the vast group of condylomas, which at present reaches 70. At present the oncological potential of types 5, 6, 11, 16, 18, 31, 33, 35 is known; while types 41, 42, 43, 44, 45, 51 and 56 are being studied in order to determine their potential.

The methods utilized are Southern Blot, Dot Blot System, in situ Hybridization and Polymerase Chain Reaction.

We can say that our inquiry has been based exclusively on colposcopy, colpocytology and directed biopsy. This is where we found normal images in which the infection of a latent condyloma (as I said some years ago "condyloma sine condyloma") could be seen.

In these pictures the ectopia, TRZ, and the same originating mucus prevail.

We found pure condyloma infection reflected in these typical pictures, but also in pictures with condylomatous colpitis which is characterized by a diffuse presence of multiple vesicles, with small white multiple proturberance, by white stains which contain inside rolled capillaries or by warts in their different manifestations too.

There are many pictures which present simple infections of condyloma or a higher degree of pathology (dysplasia). For example, leuko-, dotted, isolated mosaic or forming parts of an ARZ picture, as well as a change which cannot be classified either as TRZ or ARZ but which corresponds to an altered metaplasia in its three phases, until it reaches pictures with a high potential of malignity, such as ATZ, and so on.

Upon obtaining the pathology grade associated with HPV (pathology report) we proceeded to destroy the lesion (local destructive treatment) trying to respect as much as possible the functional structure of the cervix and / or adjacent areas.

The international literature reveals highly successful treatments even with numbers up to 94% by conservative treatments. Among those treatments we can mention cryosurgery, cauterization, dia-

thermocoagulation and thermic handler; chemical product application such as trichlorinacetic, podophyllin, as well as fluorouracil 5, vitamin A, thymus stimuline, albothyl and tetracycline. All of these products are used on lesions with a low potential of malignancy, with the aim of destroying them and trying to provoke an immunologic response as well as strengthening the defenses of the organism.

In cases of high oncological potential the diagnostic and therapeutic measures tend to be surgery (conization and hysterectomy).

The prognosis of treated lesions might also include a well defined follow-up, always by colposcopy, assisted by colpocytology and contingent biopsy. In this way we can classify its evolution, cure, improvement persistence, relapse, and progress of the initial pathological grade. Our experience has shown that 94% of patients with advanced cancer treated and followed were cured.

No cancer progression was recorded when applying any of the therapeutic treatments.

The molecular biology field is showing different trends in HPV infection. Every day genetic participation is demonstrated by concepts of permissivity and progression, with studies showing the presence of mutated p53 in pictures of HPV, dysplasia and cancer, always in proportion to the rising pathological grade.

The association between this oncogenic and cancer reaches 70% for cancer of the colon; 50% in lung cancer and 40% in breast cancer. It has also been shown in bladder, prostate, cervix, and skin tumors. This action contrasts with the true quality of p53 which is antioncogenic, or a suppressor of tumors.

In December 1993, clinical studies of the 5,400 patients evaluated showed the oncological risk to be 58%, and where there was participation of pure or associated HPV it was 87.6%. These numbers oblige us to think carefully and adjust preventive measures in cancer, either as research (diagnostic grade), or as therapeutic procedure. We also follow-up our patients, treated or not (– the only resource our country has, at present) – for the purpose of destroying lesions, to avoid tumour progress, or at least to achieve the diagnosis of cancer in a subclinical or initial phase. In short, to minimize invasive cancers and the deaths they cause.

## REFERENCES

Onnis A., et al: "Clinica delle neoplasie genitali femminili. Il carcinoma della cervice uterina: esperienze cliniche nell'Istituto di Ginecologia e Ostetricia di Padova". Gin. Clin., vol. XII, 1991, 4, 163.

De Britton R. C. et al.: "Virus and gynecological tumours in Latin America". Eur. J. Gyn. Onc., vol. VIII, 1987, 205.

Garrido J. L.: "Oncological risk 1982-1989, Panama". (7th Meet., ESGO, VE, 1991). Eur. J. Gyn. Onc., vol. XII, 1991, 7.

Torrisi A., Miceli M., Minucci D.: "Infezioni cervico-vaginali da human papilloma virus (HPV): aspetti epidemiologici ed evolutivi". *Gin. Clin.*, vol. XII, 1991, 4, 191.

Onnis A.: "Il ruolo del ginecologo nella prevenzione, profilassi e diagnosi precoce delle neoplasie ginecologiche". *Gin. Clin.*, vol. XIV, 1993, *3*, 3.

Garrido J.L.: "Manejo del riesgo oncogenico 1984-1986". Rev. Acad. de Med. Militar Praxis, Año II, 1988, 1, 4.

Dexeus S.: "Cin treatment". Eur. J. Gyn. Onc., vol. X, 1989, 3, 215.

Villasant U.: "Prophylaxis, prevention and early detection of carcinoma of the uterine cervix". Eur. J. Gyn. Onc., vol. XII, 1991, 3, 293.

Remotti G.: "Il pap-test oggi: è ancora valido?".

Rev. Med. Prac., Gin. e Urol., anno 7,
1987, 22, 202.

Barber H. R. K.: "The role of the pap smear in the practice of gynecology". Eur. J. Gyn. Onc., vol. XII, 1991, 3, 4.

Garrido J.L.: "The importance of histology. Correlation between direct biopsies and associated methodologies, Panama 1982-1985". Eur. J. Gyn. Onc., vol. IX, 1988, 6, 470.

Garrido J. L.: "Incidencia Y comportamiento de la infection por HPV en pacientes de ro, Panama 1984-1988". (Soc. Triveneta Italia, Univ. de Padua, Enero 1990). Gin. Clin., vol. XI, 1990, 4, 281.

- Madej J.: "Colposcopy standing and treatment of the papillomavirus infection of the cervix". Eur. J. Gyn. Onc., vol. XII, 1991, 3, 195.
- Garrido J. L.: "Oncological risk, evaluation 1982-1989, Panama". Eur. J. Gyn. Onc., vol. XNV, 1993, 1, 68.
  Piras G., et al.: "Le infezioni cervical da HPV:
- Piras G., et al.: "Le infezioni cervical da HPV: nostra esperienza". Gin. Clin., vol. XI, 1990, 4, 277.
- Garrido J. L.: "Evolucion de las pacientes con riesgo oncogenico tratadas, Panama 1982-1989". Arch. HST, vol. 1, 1993, 1, 29.
- Garrido J. L.: "Analysis of the cases of cancer in the Republic of Panama 1982-1989". Eur. J. Gyn. Onc., vol. XIV, 1993, 5, 419.
- Chieco-Bianchi L.: "Studies of HPV infections in HPV 1 seropositive women". Eur. J. Gyn. Onc., vol. XII, 1991, 3, 295.
- Dexeus S.: "HPV infection, precancer and eoidermoid cancer an udapte". Eur. J. Gyn. Onc., vol. XII, 1991, 3, 319.
- Bosch F. X., et al.: "Risk factors for cervical cancer in Colombia and Spain". Int. J. Cancer (UICC), 1992, 52, 750.

- Piccoli R., Santoro M. G., Nappi C., Capodanno M., De Santis V., La Torre P. C., Costa S., Montemagno U.: "Vulvo-vaginal condylomatosis and relapse: combined treatment with electrocauterization and beta-interferon". Clin. Exp. Obst. & Gyn., vol. XVI, 1989, 1 30
- Torrisi A., Reveane A., Minucci D.: "Cytologic and colposcopic examination in the diagnosis of penile HPV infection". *Clin. Exp. Obst. & Gyn.*, vol. XVI, 1989, 1, 36.
- Caroti S., Siilotti F., Caroti A., Alborino F.: "Cell-mediated immunity and condylomatosis". Clin. Exp. Obst. & Gyn., vol. XVI, 1989, 2-3, 79.
- Caroti S., Siliotti F., Caroti A.: "Male genital condylomatosis in partners of females with HPV infections". Clin. Exp. Obst. & Gyn., vol. XVII, 1990, 3-4, 181.

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