

Secondary Prevention in Uterine Cervix Cancer: What is the Most Adequate Screening Strategy?

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INTRODUCTION

Cervical cancer is the third most frequent neoplasm among women worldwide. In Spain it is the seventh most frequent malignant tumor in a global way, but it is the second one in frequency in the age group of 15 to 44 years. The incidence of invasive carcinoma in our country is found in the lower European segment, with an average population rate of 6.3 cases per 100,000 inhabitants per year and a mortality of 1.9 per 100,000 inhabitants per year [1].

In the last two decades it has been confirmed that the human papilloma virus (HPV) is the causative agent of practically all neoplasms of the cervix and its precursor lesions.

It is a pathology with effective screening based on cytology and/or detection of HPV. There are different types of screening, among them population screening is the most recommended because it is the most efficient and equitable, as well as having a higher coverage rate [2,3].

Despite being a disease with a known cause and with the possibility of screening, cervical cancer continues to be an unresolved problem in Spain where 2 women die each day due to this pathology.

CERVICAL CANCER

Cervical cancer is the third most frequent neoplasm among women worldwide [4].

Cervical cancer it is a pathology that can be prevented by different approaches:

Primary prevention

It should be based on three fundamental pillars, health information and education about risk factors, the prevention of HPV infection through the use of barrier methods mainly and the introduction of preventive vaccines. These preventive measures must involve all levels of care, from primary to specialized care and sexual and reproductive health centers [5].

Secondary prevention

It includes the realization of screening programs that detect people at risk of suffering from the disease. Screening is offered to people without symptoms of the disease and allows identifying a group at risk of suffering it.

In Europe, only cervical cancer, breast cancer and colorectal cancer meet the accepted criteria for screening according to the recommendations of the Council of the European Union. The WHO defines cervical cancer as the tumor with the best chance of prevention. Despite being pathology with a known cause and effective screening still many women continue to die from this cause [6].

The screening of healthy women by cervical cytology in an adequate and maintained manner has managed to reduce the incidence and mortality of cervical cancer by up to 80-90%.

In the last two decades it has been confirmed that the human papilloma virus (HPV) is the causative agent of practically all neoplasms of the cervix and its precursor lesions. Only 2 genotypes of high risk oncogenic HPV (HPV-AR), 16 and 18, cause approximately 70% of invasive cervical lesions and 10 other types explain 25-35% of the remaining cases.

The main scientific societies worldwide recommend all women should begin cervical cancer testing (screening) with a Pap test only or combined with an HPV test (co-testing) according to the age of the patient [7].

There are several types of screening:

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Population screening

It is carried out periodically and continued by active summons to all the A public health initiative that aims to reduce mortality from cervical cancer in the community through a previously validated women registered in the census, by mail or telephone call. In our environment, most of it is performed in primary care; there are defined protocols for referral to specialized care.

Opportunistic screening

Professional initiative that takes advantage of any assistance to make cytology to women, in the same consultation. This strategy has the disadvantage of not giving preventive coverage to women who do not go to the health system.

Spontaneous screening

Personal initiative of a woman who, duly informed, requests preventive care of her health.

The fundamental objective of screening is to reduce the incidence and mortality from cancer of the cervix. Ideally, screening should identify women with HPV infections or cervical precursor lesions with a higher risk of progression to invasive cancer.

The main reason identified is not having performed an adequate cytological screening since up to 80% of women who develop a cancer of this type had not performed cytologies or gynecological examinations in an adequate manner. These data make the search for continuous improvement of prevention strategies fully justified.

DISCUSSION

In our environment there are some limitations of screening as the problem of coverage, a fundamental parameter of quality, defining a profile of women with access difficulties: over 55 years of age, in rural areas of lower social class and the inefficient tendency to over-use of cytology in women between 25-40 years of upper-middle class with residence in metropolitan areas. These data highlight the lack of efficient population screening programs [8].

Cervical cancer screening is an essential part of a woman's routine health care. It is a way to detect abnormal cervical cells, including precancerous cervical lesions, as well as early cervical cancers.

Cervical cancer screening includes two types of screening tests: cytology-based screening, known as the Pap test or Pap smear, and HPV testing.

The screening of healthy women by cervical cytology in an adequate and maintained manner has managed to reduce the incidence and mortality of cervical cancer by up to 80-90%.

HPV tests are a very sensitive and early marker of the risk of cancer or precursor lesions, especially in women over 30 years of age. In the last decade the majority of Scientific

Societies have incorporated HPV tests in different areas of secondary prevention of cervical cancer.

Currently in Spain there is no common cervical cancer screening policy but there are different public health strategies in each of the 17 Autonomous Communities, even in our city there are different screening strategies within the different health sectors with lack of equity that is for the patients.

Majority cervical cancer screening programs are opportunistic, with non-optimal coverage and deficits in equity and efficiency. It is estimated that more than 60% of diagnosed cervical neoplasms relapse in women without previous screening or with inadequate screening [9].

The first cause of failure of the screening is that the woman does not attend. To achieve an impact on mortality, coverage must be achieved above 70% of the population. The majority of patients with cervical cancer never participated in the screening. Capturing these women should be a priority goal of screening.

Opportunistic-spontaneous screening is more expensive and less effective than the population in a global way, while opportunistic screening reduces mortality by 40%; the population does it by 90% [10].

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Establishing a population screening policy for cervical cancer, both in Spain and in other European countries, should be a priority as set out in the "European Guidelines for Quality Assurance in Cervical Cancer Screening".

Following these guidelines can also find pre-cancers, which can be treated to keep cervical cancer from forming.

The main limitation is the difficulty of access to screening by a segment of the population. In countries with opportunistic screening, as in the USA, of the total number of cases of cervical cancer diagnosed the group of women without screening or inadequate screening accounts for approximately 50% and 10%, respectively [11].

These data that are reproduced in other industrialized countries reinforce the need to implement population screening programs.

CONCLUSION

We believe that establishing a population screening policy for cervical cancer, both in Spain and in countries where this is not systematically implemented, should be a priority.

REFERENCES

1. Adriaensen WJ, Mathei C, Buntinx FJ, Arbyn M (2013) A framework provided an outline toward the proper evaluation of potential screening strategies. *J Clin Epidemiol* 66: 639-647.
2. Scarinci IC, Garcia FA, Kobetz E, Partridge EE, Brandt HM, et al. (2010) Cervical cancer prevention: New tools and old barriers. *Cancer* 116: 2531-2542.
3. Bulten J, Horvat R, Jordan J, Herbert A, Wiener H, et al. (2011) European guidelines for quality assurance in cervical histopathology. *Acta Oncol* 50: 611-620.
4. Castle PE, Bulten J, Confortini M, Klinkhamer P, Pellegrini A, et al. (2010) Age-specific patterns of unsatisfactory results for conventional Pap smears and liquid-based cytology: Data from two randomised clinical trials. *BJOG* 117: 1067-1073.
5. Sasieni P, Castanon A, Cuzick J (2009) Effectiveness of cervical screening with age: Population based case-control study of prospectively recorded data. *BMJ* 339: b2968.
6. Castellsague X, Iftner T, Roura E, Vidart JA, Kjaer SK, et al. (2012) Prevalence and genotype distribution of human papiloma virus infection of the cervix in Spain: The CLEOPATRE study. *J Med Virol* 84: 947-956.
7. Saslow D, Solomon D, Lawson HW, Killackey M, Kulasingam SL, et al. (2012) American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology screening guidelines for the prevention and early detection of cervical cancer. *Am J Clin Pathol* 137: 516-542.
8. Kulasingam S, Havrilesky L, Ghebre R, Myers ER (2011) Screening for cervical cancer: A decision analysis for the US Preventive Services Task Force. *J Low Genit Tract Dis* 17: 193-202.
9. Ronco G, Dillner J, Elfstrom KM, Tunesi S, Snijders PJ, et al. (2014) Efficacy of HPV-based screening for prevention of invasive cervical cancer: Follow-up of four European randomised controlled trials. *Lancet* 383: 524-532.
10. Dugue PA, Lynge E, Rebolj M (2014) Mortality of non-participants in cervical screening: Register-based cohort study. *Int J Cancer* 134: 2674-2682.
11. Landy R, Pesola F, Castañon A, Sansieni P (2016) Impact of cervical screening on cervical cancer mortality: Estimation using stage-specific results from a nested case-control study. *Br J Cancer* 115: 1140-1146.