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Cervical cancer in patients without abnormal cytology. Youth island, study by four years

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Abstract

Study the epithelial cervical lesions is a priority in the prevention of this cancer that it shows an evident increase of its morbidity and mortality. A retrospective descriptive study showed the behavior of 78 patients with cervical cancer without abnormal pap smear that were attended in the Young Island during June/2013 to May/2017. The 58% of the patients were younger than 42 years old, the average of first sexual relation was after 16 years old and the average of delivery and miscarriage was minor of two gestations; the 51% was attended for cervical lesions and 68% had a lesion area between 100-299mm^2. To 40% of the patient needed conization to diagnostic, 65% had earlier stages and 62% received surgery as primary treatment. The results of this study can be to design local strategies oh health to decrease the morbidity and mortality by cancer.

Introduction

Scientific of the world, interested in diminishing the incidence of the cervical cancer, they accept that to achieve the precocious diagnosis it is necessary to have present three fundamental tools: education and the population's perception about the risks to that it is exposed, means diagnoses that allow to implement an efficient, effective investigation and conservative therapeutic techniques that don't invalidate the reproductive, sexual and psychological capacity of the women [1].

The cervical cancer is the third more common among the women in the entire world, only preceded by the breast, lung and colon cancer. At world level, every year they are diagnosed approximately half millions of new cases of cervical cancer. In United States more than 10 000 new cases are diagnosed annually. In Mexico it constitutes the first cause of morbi-mortality for cancer in the female sex [2]

In Cuba, this illness constitutes an important problem of health for its high indexes of morbi-mortality and its emotional impact in the population. Their effective confrontation is only possible by means of an integral boarding and multisectorial that it incorporates the epidemic focus and that it has for main objective the prevention of factors of risk and the promotion of healthies lifestyles [3,4].

According to Sanabria Pelegrín, in their article "Sensibility and specificity of the cervical organic cytology", the International Agency for the Cancer recognizes that the sensibility of this test in the diagnosis of epithelial lesions is of around 60% [5]. Other authors consider that its sensibility you can increase up to 80% in specialized services, confirmed through colposcopic and histological studies [6].

Although in the 2016 they are presented for the first time in the country less than 1 100 cases in the last decade, in the three years' precedents had been diagnosed more than 1 400 new cases, values only reached in 2002 and 2009 from 1997.

The Youth's Island is the territory of the country with more percentage of cases of malign neoplasia's in comparison with the total population. In the year 2012 the epidemic situation the adjusted rate of 131,0 for 100 thousand habitants, was the bigger than the country [7]. In spite of the behavior of other localizations like breast, lung and colon, the cervical cancer uterine is the main gynecological localization for the last decade in the territory, and even, it overcomes to the rest of the localizations among the 30-50 years olds [8].

The realization of this study finds its foundation in the growing incidence of these pathologies, with a displacement to younger groups or little studied as the pregnant, in a local environment where the cancer constitutes one of the main problems of health and whose behavior doesn't differ of its national or international dimension. Their biggest contribution can mean the indispensable thing that it turns out to know, to diagnose and those patients that are not included by diverse causes in the pursuit of the Program of Precocious Detection of the Cervical Cancer to try and that today they represent more than the third part of the morbi-mortality for cervical cancer, of which many similar studies don't exist. To achieve this objective, it intends to describe the behavior of the cervical cancer in the Youth's Island in patient without altered cytology, according to clinical –epidemiological variables.

Design methodological

It was carried out a retrospective descriptive observational study to describe the behavior of the cervical cancer in patient without altered cytology of the Youth's Island during the four years understood between June of 2013 and May of 2017, according to clinical – epidemiological variables. The study universe was understood by the 206 patients with cervical cancer from the carcinoma in situ stage of the described period,

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studying you like sample the 78 patients that didn't have an abnormal cytology. The analysis variables included risk factors such as menarquia, age of first sexual relationships, parity, carried out abortions, smoke, contraception and family antecedents of cancer. The consultation reason settled down according to cytology with IHPV (infection for human papilloma virus) or benign, bled affection post-coital, persistent leucorrhea or visible lesion in cervix. Other studied variables were age, origin place, cytological, colposcopic and histological diagnosis, as well as elements related with colposcopic details, clinical stadium according to the International Federation of Gynecology and Obstetrics (FIGO) and the therapeutic modality.

For the gathering of the necessary information for the study the leaves of position of the Consultation of Benign Pathologies of this period were revised, the individual clinical histories of the patients, their cytology cards (in a previously requested copy), the database contained in the software SPIC version 3.0 of the SUMASCOPE and the histological reports of the Department of Pathological Anatomy of the "Baire´ Hero" Hospital.

For the prosecution of the data, a base data was made in Microsoft Excel 2010, what allowed to determine summary measures for qualitative and quantitative variables as total, average or half arithmetic, percentages. The rate of incidence for popular advice settled down for 1000 women.

Conflicts of interest don't exist in the realization of this study. The information here presented it will only be used with investigative ends, being respected the identity and other ethical elements of the studied patients and completing the established regulations to such an end, with the previous approval of the Committee of Ethics of the Investigation of this institution.

Analysis of the results

The study sample constituted 38% of the all patient with cervical cancer in the period. The analysis of the age distribution in the patients' fulfilled years represented in the Table 1 sample as the represented groups was those of 25-33 years (24,4%), younger than 25 years (18,0%) and 52-60 years olds (16,7%), followed by the 34-42 year olds group (15,4%). However, although the 25-33 year olds group represented the biggest rate for 10 000 women for the population estimated in that interval with 35,8 cases, the patients older than 52 years represented an accumulated rate of 48,3. It was appreciated that 40% belongs to the Policlinic 2 (urban zone), followed by the Policlinic 3 (32%, rural zone) that presented the biggest adjusted rate according to its total of studied population.

As for the variables of risk, an average of 41,4 years old, the stocking of the menarquia was observed (13 years), age of the first sexual relationships (16 years), parity (2,0), abortions (1,4), use of intra-uterine devices (73%) and hormonal contraception for 5 years or more (36%), smoke (27%) and antecedents of altered cytologies (16%). In this series, 6% of the patients had a previous cone.

As for the consultation reason for areas of health is observed in the Table 2 as the visible lesion to the exam to speculate it was the cause more common of specialized medical attendance with more than half of the cases (51%), followed by the cytology with benign affections (22%) and the persistent leucorrhea (18%).

Considering the cytological diagnosis like an excellent element in the reception of patient to the Consultation sees like around the fifth three parts of the cases (62%) they presented a negative cytology and 17% they were not understood in the age of the Screening Program.

When describing the behavior of the size of the lesions identified in the cervix it is observed that in 37% of the patients the lesion area was of 200-299mm^2 while in 31% the area was 100-199 mm^2 and in 19% the area was of 200-299 mm^2. In 60% of the patients the definitive diagnosis was made starting from a biopsy by punch while in 40% remaining, the result was characteristic of a conization.

In the Table 3 are observed as the third part of the patients (32%) it was in the stage 0 (carcinoma in situ) and a fourth part (24%) in stage Ia (carcinoma microinfiltrante), followed by the patients in stage II (17%) and stage III (14%).

As for the treatment modality, 61,5% of the patients received a surgery like primary treatment and of them, 39,7% was conizadas (conservative treatment). For the rest, 35% of the patients received some modality of adjuvant treatment.

Discussion of the results

Actually, the cervical cancer continues being a preponderant cause of mortality in the women at world level, although it is the neoplasia with the biggest demonstrated potential of second prevention [9].

A report of the National Center for Health Statistics shows like until 15-17% of the cases diagnosed in the United States in the period 2009-2013 they were outside of the age range that contemplates the Cuban Program Screening and more than half of the cases in women younger than 45 years of age, in a series of almost 13 000 new cases/year [10].

The results of this investigation coincide with most of studies published regarding the age of the patients, with stockings that oscillate between 27 and 47 years old [11,12]. The fact of finding the biggest quantity in cases below 34 years (44%) it denotes the precocity with which they spread to appear these lesions precursors. Examples of this

Table 1. Cervical cancer by age group. Youth Island, June 2013-May 2017

Age Group (years)	Cases	%	Female population	Rate * 10 000 women
Younger than 25	14	17,95	9 735	14,38
25-33 years old	19	24,36	5 301	35,84
34-42 years old	12	15,38	6 731	17,83
43-51 years old	11	14,10	6 400	17,19
52-60 years old	13	16,67	4 406	29,51
Older than 60	9	11,54	4 771	18,86
Total	78	100	37 344	20,89

Table 2. Cervical cancer by attendance reason. Youth Island, June 2013-May 2017

Attendance reason	No.	%
Visible lesions	40	51,28
Pap test with benign affectation	17	21,79
Persistent leucorrhea	14	17,95
Abnormal genital bleeding	7	8,97
Total	78	48,72

Table 3. Cervical cancer by FIGO stage. Youth Island, June 2013-May 2017

Stages	No.	%
Carcinoma in situ (stage 0)	25	32,05
Stage Ia	19	24,36
Stage Ib	7	8,97
Stage II	13	16,66
Stage III	11	14,10
Stage IV	3	3,85
Total	78	100

are works like those of Leguevaque [13] (average of 38 years); Lubrano [14], with age average of 37,8 ± 8,9 (range 18-73); Söderlund-Strand [15] with age average of 34 years old (range 21-55); Chen et al [16] that we carried out a study in which 1 113 conizate patient was analyzed with age average of 38,1 ± 7,2; Costa [17], with average of 35±8,8 years old (range 18-75); Serati [18], with 37,5 ±10,3 year-old and Tropé [19] with average of 37,6, 36 years old and with a 20-75 years old range. Therefore, this study is carried out with a group of women comparable to the main published studies.

The basic explanation of this phenomenon is related with the own natural evolution of the infection for the HPV considered necessary cause for the development of an intraepithelial lesion of cervix. In young population, although the prevalence of the infection is very high, it is also it the clearing capacity for the immune system. However, after the 30-35 years, this clearing capacity diminishes and the infection for the HPV persists in the cervical epithelium developing its oncogenic capacity and increasing the prevalence of CIN2+ that requires surgical treatment.

Several bibliographical revisions have valued the accuracy of the one sieved with conventional cytology comparing it with the histological diagnosis. The notable's differences in the sensibility of the cytology among the different publicaciones [20,21] can be explained by the scarce reproducibility of the cytology or different biases, in the revision process, in the selection of the cases, in the threshold of valuation or in the used reference standard.

Some articles like the one presented by Carbajal and Torres [22] only mentions a cytological disagreement of 24%, while others as Perrotta and Velázquez [23] mentions 52% of disagreement. In the national context it deserves mention the work of Alina Moré and Carlos Moya [24] in the University Hospital "Martyrs of April 9" (Villa Clara). In this study the result was analyzed from the previous organic cytology to the entrance of the patients in the consultation, and it could appreciate again that a direct relationship exists among the infection for the HPV and the appearance of the cervical intraepithelial lesions, since in 72,6% of the patients the cytological discovery of the HPV existed, against alone 27,4% of patient with negative cytologies. Similar results refer Martínez Cordero [25] in their study in Mayabeque.

It is well-known that the presence of the HPV is the factor of more important risk for the development of the cervical intraepithelial lesion. The chronicle persistence viral is definitive for the progression toward a pre-invasive lesion. The genotype of HPV and their progression capacity from a lesion of low degree to a lesion of high degree have been studied by diverse works. Khan et al [26] found that in women infected by a HR-HPV (high risk) with negative initial cytology, 10% of the women infected by HPV 16 or 18 CIN3 presented to the 3 years and 18-20% to the 10 years. However, the progression to CIN3 of the rest of viral types were of 1-2%. therefore, they are the genotypes 16 and 18 those that present bigger risk.

The same as in this study, Ramos [27] found in its sample that the most frequent histological lesion in the conization piece was HSIL in 76,5% of the cases being distributed in CIN2 (44,6%) and in CIN3 in (31,9%). In 13,1% of the total, it was not lesion in the conization piece, and in 4,2%, the result was of LSIL. There were 6 cases of AIS, 4 cases of carcinoma in situ, 5 cases of carcinoma epidermoide and one of invasive adenocarcinoma.

Diverse studies have demonstrated that even with the use of strict approaches of selection, approximately of 10-20% of the patients with confirmed histology of CIN2-3 in the biopsy directed by colposcopy before the surgery, residual CIN doesn't present in the definitive histology of the conización piece. In the study of Livasy [28] the percentage of negative cones was of 13,8%, in the series of Ryu [29] 17,7% and in that of Rodríguez-Manfredi [30] 16%. These dates are completely comparable to the opposing ones in the work of investigation of the Dra. Raquel Ramos [27].

The evidence of several studies suggests that in women with non-satisfied parity and carcinoma in situ or microinfiltrante can be been in a conservative way with handle LEEP or cold scalpel with rates of recurrence smaller 5% in two years [12,31]. A study of Soneji-Fukui in 2013 showed a recurrence in these patients of 1,8% in three years [32]. In this study, the high percentage of younger patients justifies the conizaciones number, with recurrence smaller 4%. A goal-analysis of 33 studies showed that the risk of residual illness was of 2,6% with negative margins and 19,4% with positive margins. The carcinoma invader also associated with positive margins in 5,2% [33] being required a second division or to complete hysterectomy, with satisfied parity [33,34].

Conclusions

It is significantly high the number of younger patients, with clinically visible lesions, not being evidenced an abnormal behavior of the classic factors of risk for this illness. The precocious diagnosis only meant the third two parts of the study sample, for what a significant number of cases needs adjuvant treatment.

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