THE SCREENING FOR CERVICAL CANCER IN WOMEN OVER 60 YEARS

R. POPOVICI[1], V. POPOVICI[2], E. ANTON[3]

[1,3] University of Medicine and Pharmacy "Gr. T. Popa" Iaşi, [2] Municipal Emergency Hospital "Elena Beldiman" Bârlad

Keywords: *cervical cancer, screening, women aged over 60 years*

Abstract: *Cervical cancer is a condition more and more often met in elderly women. Most screening programs do not include women over 65, based on the general acceptance that the period of maximal, vulnerability' to this neoplasm is over. This study was carried out on 260 women over 60 years to whom a Pap smear was performed as a screening of cervical cancer. The rate of non-participation was 21%. The cytologic results were within the normal range in 82,3 % of the cases, had a low degree of abnormalities (CIN 1, ASCUS, AGUS) in 14,5%, a high degree of abnormalities (CIN 2, CIN 3, carcinoma) in 3,2% of the cases. For two of the women involved the suspicion of squamous cell carcinoma was confirmed histologically. The screening for cervical cancer makes sense in women over 60 too, especially for those who had no cervical cytological investigations in their life, or only had them randomly.*

Cuvinte cheie: *cancer de col uterin, screening, femei cu vârsta peste 60 de ani*

Rezumat: *Cancerul de col uterin este o afecţiune din ce în ce mai frecvent întâlnită la femeile vârstnice. Majoritatea programelor de screening nu includ femeile cu vârsta peste 65 de ani considerându-se că perioada de "vulnerabilitate" maximă în faţa acestei neoplazii este depăşită. Material şi metodă: Lucrarea prezintă un studiu pe 260 de femei cu vârsta peste 60 de ani cărora s-a efectuat testul Papanicolaou în scopul efectuării screening-ului cancerului de col uterin. Rata de neparticipare a fost de 21%. Rezultatele citologice au fost în limitele normalului în 82,3 % din cazuri, grad scăzut de anormalitate(CIN 1, ASCUS, AGUS,) -14,5%, grad înalt de anormalitate(CIN 2, CIN 3, carcinom)- 3,2%. În cazul a două participante suspiciunile de carcinom scuamos au fost confirmate histologic. Concluzii: Screening-ul cancerului de col uterin îşî are sensul şi la femeile cu vârsta peste 60 de ani, în special la acelea care nu au efectuat deloc sau în mod regulat citologii cervicale pe parcursul vieţii.*

INTRODUCTION

According to USA statistics, about 30% of the newly diagnosed cases of cervical cancer and 41% of the yearly deaths caused by this type of cancer occur in elderly women. (3)

Women who are over 60 years at the time of the diagnosis of a cervical are usually in a more advanced stage of the disease, due either to the fact that they had had no screening done through the Pap smear or because part of the HPV infections acquired in the third and fourth decade of their life had advanced and become manifest as cervical cancer after the age of 60. At this age, the HPV infection is present in over 93% of the cases of squamous cell cervical carcinoma. The serotypes identified seem to be similar to those which cause neoplasia in young patients.(1,2,4) The screening for cervical cancer through the Pap smear allows us to diagnose cervical neoplasia at an early stage and therefore to increase the efficiency of the treatment (a decrease in 5-year mortality of about 70%).

Performing the Pap test in elderly women can be difficult due to the atrophic and stenotic modifications of the cervix. These changes may cause the colposcopy to be performed with difficulty, as the squamocolumnar junction is hard to identify. (6) The American Cancer Society (ACS) recommends the screening to begin at approximately 3 years after the start of sexual life. The upper age limit varies in different studies. ACS claims that no screening is necessary in women over 65 with no risk factors. However, the American Geriatric Association recommends that a Pap smear screening should be performed every 1 to 3 years up to the age of 70, on condition that the patients had no pathologic results in the previous 10 years and that the latest 3 tests came out normal. The use of the detection of the HPV infection test alongside the Pap smear seems not to have increased the predictive value of the screening. (5,2).

The NHS guides (National Health System – UK) set an age range of 25 to 64 for the cervical cancer screening. Patients over 64 years of age, with the last three cervical cytology tests normal do not need to continue the screening. In case of abnormal cytology, the screening will continue regardless of age until at least 3 cytology tests carried out in a 6 months interval come normal. (NHS Guideliness for Cervical Cancer Screening 2010)

THE AIM OF THE STUDY

The purpose of the study is to establish the opportunity of cervical cancer's screening in women over 60 years of age.

MATERIAL AND METHOD

The evaluation of the incidence of cervical cancer in women over 60 was carried out by screening the population pertaining to one outpatients department in Bârlad, between 2009 and 2010, in collaboration with the local medical staff and a private laboratory where the Babes – Papanicolaou smear test was performed. The gynaecological investigation was carried out in a speciality practice, the costs related to the lab analyses and reagents being covered by a private investment.

Before the screening, each patient was handed out a

[1]Corresponding Author : R Popovici, 77, block of flats .T9, App. 7, Arcului street, Iaşi, cod 700135, Romania; e-mail: razpopovici@yahoo.com; tel +40-0744596918

Articol received on 19.10.2010 and accepted for publication on 21.02.2011
ACTA MEDICA TRANSILVANICA March 2011; 2(1)234-235

short questionnaire covering their gynecological condition and the history of their screenings. The gynaecological investigation was performed using a vaginal speculum, followed by a bimanual pelvic exam and rectal exam. The cytology samples were collected from the cervix and the endocervical canal using a Rambrush brush. A specimen was also collected from the posterior vaginal cul de sac. The specimens were smeared on glass slides, marked to indicate either the cervical or the vaginal source and were immediately set with aerosol fixing spray. All exams were carried out according to preset standards. The cytological forms were marked with a Pap smear notation, and the possible infections (coccs, Monilia, Trichomonas, herpes) were specified, as well as any atypia, including cellular modifications caused by the associated inflammation. The Papanicolaou smears which were considered insufficient were subsequently collected again.

RESULTS AND DISCUSSIONS

A number of 260 women were asked to take part in the study. Of these, 205 accepted (79%) and 55 refused (21%). The participation of women according to age group was as follows:

Table no. 1. Distribution of women by age groups

	Age group	Number of women	Percentage (%)
1	60-64	35	17,1
2	65-69	40	19,5
3	70-74	61	29,7
4	75-79	33	16,1
5	80-85	36	17,6
		205	

From the above we notice that the highest participation was in the age group 70-74. The interpretation of data was classified into: satisfactory, satisfactory but limited for a proper interpretation or unsatisfactory.

The category, satisfactory, but limited to a proper interpretation' was used when the collected sample was used for interpretation, but the interpretation was limited. Among the influencing factors we may mention: presence of blood in the specimen, severe inflammation, reduced fixation, contamination. The category ‚unsatisfactory' was used when the quality of the sample made interpretation impossible.

The percentage for ‚unsatisfactory' was 5,6%, ‚satisfactory' was 70,8%, and, satisfactory but limited to the interpretation proper' was 23,6%. The slides considered, unsatisfactory' were eliminated, a number of 194 slides remaining in the study. The cytology results were interpreted according to the following criteria:

- normal - 82,3% of all the cases (160 Pap smears);
- low degree of abnormality – 14,5% (Pap smears);
- high degree of abnormality - 3,2% (Pap smears);

The normal degree included cells with benign aspect and cells with alterations within the limits of normality, the low degree of abnormality includes LGSIL (CIN 1), ASCUS, AGUS and moderate dysplasia and the high degree of abnormality included high-degree intra-epithelial squamous lesions (HGSIL-CIN 2), severe dysplasia(CIN 3) , ‚in situ' carcinoma, invasive carcinoma. The patients with CIN 3, under the suspicion of a carcinoma had to undergo a biopsy; subsequently 2 cases of carcinoma were confirmed, one of them, in situ'. Mention must be made that the patients diagnosed with squamous cell carcinoma of the cervix had never had a Papanicolaou smear test before.

History of the screening: 35% of the women said that they had had some Pap test before, of which 21 % (15 women- 7% of the all participating women) said they had had regular tests every 3 to 5 years; 65% of the women had never had a Pap test before

Symptoms: When asked about their gynecological symptoms, 18 patients (9,5%) reported the presence of symptoms, while 176 patients (90,5%) were asymptomatic. Reported to gynecological symptomatology, the most common symptom was urinary stress incontinence (33%, i.e. 6 patients), followed by vaginal pruritus (24% - 5 patients), vaginal discharge (19% - 3 people), vaginal bleeding (12% - 2 people) and others (12%- 2 people) – pelvic pains, dispareuny, dysuria, polyakuria, haematuria. Status after hysterectomy: 10 patients (5,2%) declared that they had undergone a hysterectomy, of which 6 (3 %) had had subtotal hysterectomies. Collection of the smear in the case of patients with total hysterectomy was carried out at the level of the vaginal tranche.

CONCLUSIONS

In this study, at first sight, the most striking fact was that 65% of the women had never had a Papanicolaou test before, only 7% had had a regular Pap smear, rest of the participating women having irregular Pap smears. Most patients belonged to the low-income group, besides a low level of health care information, which adds up to a high risk factor for the appearance and development of cervical cancer. The presence of other risk factors, such as multiple partners, or venereal diseases, could not be obtained from these elderly patients, and therefore could not be included in our study. The rate of non-participation (21%) was quite high, which shows a high risk of incidence of possible abnormal Pap smears in the future. This hypothesis was supported by other studies, which showed a high prevalence of cervical cancer in non-participant women over 60 years of age. The results of our study support the idea of performing at least one first screening in asymptomatic women over 60, especially those who had never had a Pap test before or those who only had a few random tests before. The number of women included in the study was relatively low, on the one hand because we encountered difficulties in attracting patients to the study and on the other hand due to the high costs involved. The latter argument is a well-acknowledged factor for the comparative cost-benefit analyses pertaining to the cancer screening programs

REFERENCES

1. Walboomers JM, Jacobs MV, Manos MM, et al. Human papillomavirus is a necessary cause of invasive cervical cancer worldwide. J Pathol. 1999; 189:12-19.
2. Bosch FX, Manos MM, Munoz N, et al, International Biological Study on Cervical Cancer (IBSCC) Study Group. Prevalence of human papillomavirus in cervical cancer: a worldwide perspective. J Natl Cancer Inst. 1995; 87:796-802.
3. Balducci L., Lyman GH , Ershler WB et al. ,eds. Comprehensive Geriatric Oncology , 2nd ed. Philadelphia, Lippincott Williams and Wilkins ; 2004.
4. Gostout BS, Podratz KC, McGovern RM, Persing DH. Cervical cancer in older women: a molecular analysis of human papillomavirus types, HLA types, and p53 mutations. Am J Obstet Gynecol. 1998; 179:56-61.
5. Saslow D, Runowicz CD, Solomon D, et al, American Cancer Society. American Cancer Society guideline for the early detection of cervical neoplasia and cancer. CA Cancer J Clin. 2002;52:342-362.
6. Parazzini F, Negri E, La Vecchia C, Bocciolone L. Screening practices and invasive cervical cancer risk in different age strata. Gynecol Oncol. 1990;38:76-80.