

CERVIX CANCERUL – RETROSPECTIVE STUDY THE CASUISTRY OF THE OBSTETRICS GYNECOLOGY CLINIC OF SIBIU DURING 2001 - 2011

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Keywords: cervical cancer, incidence, retrospective study

Abstract: The present paper has as objective the study of the frequency of the surgical interventions for the cervical neoplasm from the total number of gynecological interventions, classically or laparoscopically, reported to the age, parity degree, clinical stadiality and the surgical approach, using a retrospective study on the cases in the Clinic of Obstetrics-Gynecology during 2001-2011.

Cuvinte cheie: cancer de col, incidenta, studiu retrospectiv

Rezumat: Folosind studiul retrospectiv asupra cazuisticii Clinicii OG Sibiu in perioada 2001-2011, lucrarea de fata isi propune sa studieze ponderea intervențiilor chirurgicale pentru neoplasm de col uterin din totalul intervențiilor ginecologice operate clasic si laparoscopic, în raport cu vârsta, gradul de paritate, stadialitatea clinică si calea de abord chirurgical.

INTRODUCTION

The cervical cancer represents a pathology with high incidence in our country (1st place in Europe), and in the Sibiu county. The cervical cancer is the second form of cancer as frequency in the whole world and the most common cancer of the females in the developing countries (1). In the S.U.A., the invasive cervical cancer is the third form of gynecologic cancer.

In the present paper it was studied the surgical casuistry with the diagnosis of cervical neoplasm operated during 1st of January 2001 – 15 May 2011, in the Emergency Clinical County Hospital Sibiu.

THE PURPOSE OF THE STUDY

The aim of the research is represented by the evaluation:

- Of the global incidence of the surgical classical treatment and laparoscopic one in the malignant pathology of the cervix in the Obstetrics-Gynecology clinic of Sibiu.
- Of the incidence reported to the laparoscopic interventions.
- Of the incidence reported to the classical interventions.
- Of the incidence of the classical surgical interventions towards the laparoscopical ones for cervical cancer.
- Of the incidence of the operated casuistry for cervix cancer reported to the clinical stadiality.
- Of the incidence of the cervix cancer reported to the age.
- Of the incidence of the casuistry of the cervical cancers reported with the parity degree.

MATERIAL AND METHOD

The material used in the study is constituted by the observation files and by the registers of surgical interventions of the Gynecology section, the research method being constituted from the analyses of the operated casuistry for cervical neoplasm in the Clinic of Obstetrics – Gynecology Sibiu, in the period 1st of January 2001 – 15 May 2011.

The main aspects followed were: the frequency of the surgical interventions for the cervical neoplasm from the total of

the gynecological interventions in the studied period, the analysis of the operated casuistry reported to the age, the parity degree, the clinical stadiality and the surgical approach.

The research lots included a number of 166 patients admitted and operated in the period of 1st of January 2001 – 15 May 2011, were taken into study all the admitted women for the cervical neoplasm in the studied period, at whom a surgical therapeutic proceeding was applied.

RESULTS AND DISCUSSIONS

a. Global incidence

In the study period in the Clinic of Obstetrics-Gynecology of Sibiu were effectuated a number of 4021 surgical interventions among which a number of 166 cases (4,13%) were effectuated for cervical cancer in different evolution stages; a number of 3855 cases (95,87%) were effectuated for other types of surgical gynecological pathology. We consider this percentage as being significant; he reflects an important weight of this type of surgical intervention in this type of pathology, in the frame of the total number of effectuated surgical interventions. The weight of those interventions is high due to the fact that in this clinic there are also cases from the limitrophe counties Vâlcea, Alba, Hunedoara, etc).

Table no. 1. The incidence of the surgical interventions for the cervical cancer from the total amount of effectuated surgical interventions

| Surgical interventions | Number | Percentage (%) |
|---|--------|----------------|
| Surgical interventions for the cervix cancer | 166 | 4.13 |
| Surgical interventions for other gynecological affections | 3855 | 95.87 |
| The total number of surgical interventions | 4021 | 100 |

b. The incidence reported to the laparoscopical interventions

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During the study in the Obstetrics-Gynecology Clinic of Sibiu were effectuated a number of 577 laparoscopic surgical interventions. Among those, 42 were effectuated for cervical cancer representing 7.27%, from the total of the laparoscopic surgical interventions. For other surgical gynecological affections were effectuated a number of 535 surgical interventions representing 92.72%. This weight reflects the remarkable interest of the clinic for the implementation of the surgical laparoscopic techniques in the genital pathology in general, and that of the cervix, specially. On a worldly plan there are few medical centres in which this pathology is laparoscopically approached. In the table no.2 and figure no.2 is represented the incidence of the surgical interventions for cervical cancer from the total of the effectuated laparoscopic surgical interventions.

Figure no. 1. The incidence of the surgical interventions for the cervical cancer from the total amount of the surgical interventions

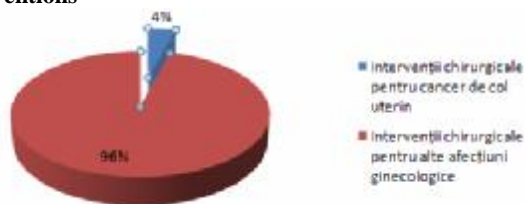
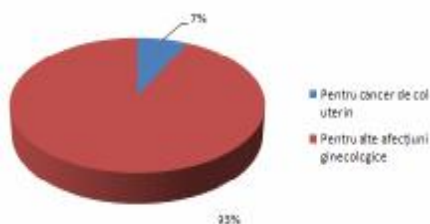


Table no. 2. The incidence of the surgical laparoscopic interventions for the cervical cancer from the total of the effectuated laparoscopic interventions.

| Surgical laparoscopic interventions | Number | Percentage (%) |
|---------------------------------------|--------|----------------|
| For cervical cancer | 42 | 7.27 |
| For other gynecological interventions | 535 | 92.72 |
| Total number | 577 | 100 |

Figure no. 2. The incidence of the laparoscopic surgical interventions for cervical cancer from the total of the effectuated laparoscopic interventions.



c. The incidence reported to the classical interventions

In the studied period, in the Clinic of Obstetrics-Gynecology from the County Hospital of Sibiu, were effectuated a number of 3444 surgical gynecological interventions, among which 124 surgical interventions for cervical neoplasm, their frequency being of 3,60% and 3320 surgical classical interventions for other gynecological diseases, representing 96,40%. In table no. 3 and figure no.3 are represented the surgical classical interventions for the cervical neoplasm and for other gynecological affections.

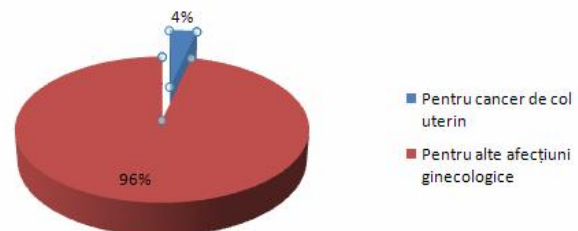
d. The incidence of the classical surgical interventions towards the laparoscopic ones for thr cervical cancer

From the total amount of 166 surgical interventions for the cervical cancer a number of 124 were realised on the classical way, representing 74.69% and a number of 42 were realized on the laparoscopic approach, representing 25.31%.

Table no. III. The incidence of the classical surgical interventions for the cervix cancer rappedorto to the classical surgical interventions for other gynecologic pathology.

| Classical surgical interventions | Number | Percentage (%) |
|------------------------------------|--------|----------------|
| For the cervical cancer | 124 | 3.60 |
| For other gynecological affections | 3320 | 96.40 |
| Total number | 3444 | 100 |

Figure no. 3. The weight of the different types of surgical classical gynecological interventions



The higher weight of the laparoscopic interventions shows the preoccupation for the implementation of this surgical technique also in the malignant pathology of the cervix, this technique being fitted in the complex therapeutical alorhytm radio-surgical of this pathology. We have to, evidientiate the high weight of those interventions considering the fact that this type of pahtology may be laparoscopically approached only in the incipient stages (stage O and stage I).

There were effectuated, also, laparoscopic interventions for the completion of some classical surgical interventions effectuated suboptimal in other services from the country or in Sibiu. The minimally invasive surgical tehniques represent method of election for the limphadenectomy, to complete the suboptimal surgical interventions. There were effectuated also stadialization laparoscopies and limph biopsy in the cervical cancer, the laparoscopy permitting a stadialization of a surgical stage more than precise than the clinical pre-therapeutic stadialization.

This allows either the avoidance of the difficult interventions or imposible to realize in advanced therapeutical stages, either establishing the surgical approach for the radical intervention that will be effectuated. Also, the stadialization interventions were effectuated in the purpose of scientific research for the establishing of the therapeutical protocols that include in the complex therapy algorithm the technique of laparoscopic approach.

In the table no.IV and figure no.4 is represented by the weight of the classical and laparoscopic interventions from a total of 166 patients operated for cervical cancer in the period of 1st January 2001 – 15 May 2011.

Table no. 4. The incidence of the classical surgical interventions toward the laparoscopic ones for the cervical cancer

| Surgical interventions for the cervix cancer | Number | Percentage (%) |
|--|--------|----------------|
| Classical | 124 | 74.69 |
| Laparoscopic | 42 | 25.31 |
| Total | 166 | 100 |

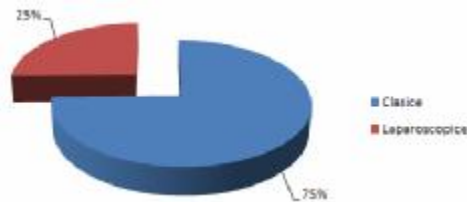
e. Incidența cazuisticii operate pentru cancer de col uterin în raport cu stadialitatea clinică

The clinical stages represents the main prognosis element regarding the cervical cancer (3) . That is why it is extremely important to be studied the incidence of the casuistry rappedorto to the clinical stages. Also, it is well-known the fact that, the therapeutical results are better, as the treatment is

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effectuated in incipient stages. It would be ideal that this type of pathology to be treated in the pre-invasive stage or to be prevented through the administration of the specific vaccine. From the total amount of the 166 cases operated for cervix cancer, in the O stage were operated 24 cases representing 14.45%, in the I stage, 56 cases representing 33.73%, in the II stage, a number of 84 cases representing 50.60%, in the stages III and IV one case.

Figure no. 4. The incidence of the classical surgical interventions towards the laparoscopic ones for the cervical cancer



From the cases in the I stage (56 cases), a number of 16 were stage IA, representing 9.63% from the total, and in the stage IB were 40 cases, representing 24.09%. For the cases in the II stage, a number of 20 (12.04%) were stage IIA, and a number of 64 cases (38.55%) were in stage IIB. In the stage III only one operated patient, being a stage IIIB reconverted to surgery point (stage IIB) after radiotherapy.

For the IV stage, it was only one suboptimal case being effectuated only sub-total hysterectomy, the fact being due to the pre-surgery wrong stadialisation. It was known the fact that the stages III and IV are outside the possibility of the surgical therapeutic approach (3). Only 20% of the malignant pathology was operated in the pre-invasive incipient clinical stage. This thing shows a lack of sanitary education of the females that come too late in the service of gynecology for diagnosis and specific treatment.

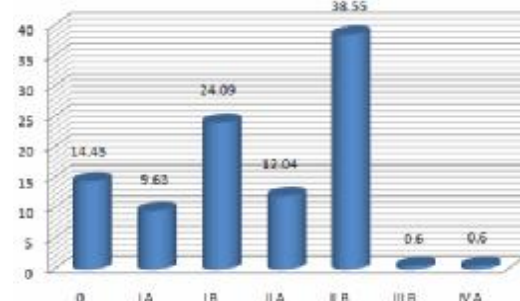
It shows, also, the fact that the actual organization of the sanitary system is extremely lean, regarding the precocious diagnosis of the cervix cancer. The cytologic screening isn't functional at present in Sibiu county, the diagnosis of the cervix cancer being effectuated individually at the patients adressability. Because România at present occupies the 1st place in Europe, regarding the incidence of this type of pathology, we consider that the precocious diagnosis of the cervix cancer could be done efficiently through the systematic introduction of the known methods of screening diagnosis of this pathology in the Sibiu county and in the country. Also, the methods of sanitary education of the females should be intensified. In the countries with a good organisation of the diagnosis network of the cervix cancer, the percentage of the operated cancers in the incipient stage is of approximatively 80%. In the table no. 5 and figure no.5 is represented in percentages the incidence of the operated casuistry reported to the clinical stadiality.

f. The incidence of the cervix cancer, at the operated casuistry, reported to the age

The age represents an important prognosis element in the cervical cancer because it is wellknown the fact that in younger women appear, usually, low differentiated carcinomas with an evolutive aggressivity bigger than the cancers well differentiated from the histological point of view. From the literature is known that the incidence of the cervix neoplasm is bigger between 35 – 65 years and rarer under the age of 35 years. For this criterion the following division was made on age groups: 24-30 years, 31-35 years, 36-40 years, 41-45 years, 46-50 years, 51-55 years, 56-60 years, 61-65 years, 66-70 years and

over 70 years. We have analysed the frequency of the global phenomenon for all the patients operated of cervix neoplasm.

Figure no. 5. The percentage representation of the clinical stadialization of the cervix cancer at the patients in the studied period.



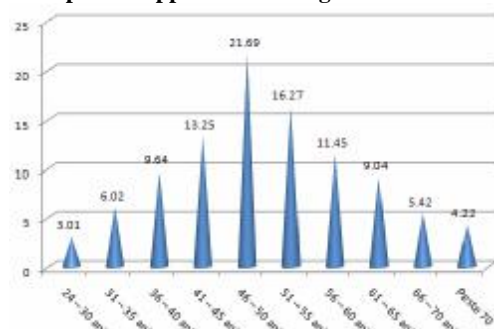
Among the 166 operated cases for cervix cancer, the repartition on age groups is the following: 24-30 years = 5 patients (3.01%); 31-35 years = 10 patients (6.02%); 36-40 years = 16 patients (9.64%); 41-45 years = 22 patients (13.25%); 46-50 years = 36 patients (21.69%); 51-55 years = 27 patients (16.27%); 56-60 years = 19 patients (11.45%); 61-65 years = 15 patients (9.04%); 66-70 years = 9 patients (5.42%); Over 70 years = 7 patients (4.22%). This data are concordant with the ones in the speciality literature regarding the incidence of this pathology on age groups. The smallest incidence was met at the group of age over 70 years with 7 patients (4.22%) and at the group of age 24-30 years with 5 patients (3.01%).

In the table no.6 and the figure no. 6 is presented the incidence of the surgical interventions for the cervical neoplasm reported to the studied age groups (numerically and percentage)

Table no. 6. The incidence of the cervical cancer on age groups

| Surgical interventions for the cervix cancer. Age groups (years) | Number | Percentage (%) |
|--|--------|----------------|
| 24 – 30 ani | 5 | 3.01 |
| 31 – 35 ani | 10 | 6.02 |
| 36 – 40 ani | 16 | 9.64 |
| 41 – 45 ani | 22 | 13.25 |
| 46 – 50 ani | 36 | 21.69 |
| 51 – 55 ani | 27 | 16.27 |
| 56 – 60 ani | 19 | 11.45 |
| 61 – 65 ani | 15 | 9.04 |
| 66 – 70 ani | 9 | 5.42 |
| peste 70 ani | 7 | 4.22 |
| Total | 166 | 100 |

Figure no. 6. The incidence of the operated cases for the cervical neoplasm reported to the age.



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Table no. 5. The incidence of the operated casuistry reported to the clinical stages

| Clinical stages | | Std 0 | Std I A | Std I B | Std II A | Std II B | Std III B | Std IVA | Total |
|--|--------|-------|---------|---------|----------|----------|-----------|---------|-------|
| Surgical interventions for the cervix cancer | Number | 24 | 56 | | 84 | | 1 | 1 | 166 |
| | | | 16 | 40 | 20 | 64 | | | |
| | % | 14.45 | 33.73 | | 50.60 | | 0.60 | 0.60 | 100 |
| | | | 9.63 | 24.09 | 12.04 | 38.55 | | | |

g. The incidence of the casuistry of the cervical cancers operated reported to the degree of parity

From the specialty literature we know that the cervix neoplasm is especially, the privilege of the persons with antecedents of multiple births, miscarriages and turbulent sexual life. It is known the fact that the nulipares develop rarely cervix cancer, and the women with no sexual life, develop it exceptionally.

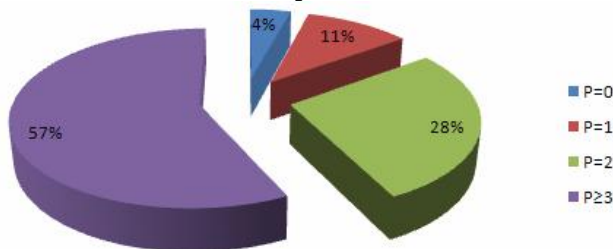
From the effectuated study results that from 166 patients operated for cervix neoplasm, nulipares were 7, representing 4.22% from the operated casuistry, primipares were 18 (10.84%), secundipares were 46 (27.71%), and multipares were 95 representing 57.23%. Those results confirm that the forward mentioned data from the literature, through the fact that the secundipares together with the multipares totalize over 80% of the cases.

In the table no. 7 and the figure no. 7 is represented numerically and percentually the frequency of the operated cases for cervix neoplasm in accordance with the degree of parity of the patients.

Table no. 7. The incidence of the casuistry of the cervical operated cancers, reported to the parity degree

| Parity degree | | P=0 | P=1 | P=2 | P≥3 | Total |
|--|----------------|------|-------|-------|-------|-------|
| Casuistry operated for the cervical cancer | Number | 7 | 18 | 46 | 95 | 166 |
| | Percentage (%) | 4.22 | 10.84 | 27.71 | 57.23 | 100 |

Figure no. 7. The weight of the operated casuistry reported to the number of birth of the patients



CONCLUSIONS

1. The cervix cancer represents a pathology with increased incidence in our country (1st place in Europe), and in the county of Sibiu
2. From a number of 4021 surgical interventions, effectuated in a period of 10 years, 166 were for the cervix cancer, effectuated in different evolutive stages of the disease, representing 4,13%.
3. The surgical approach was the classical one and the laparoscopic one, for the first time on a national plan.
4. Through the multiples advantages offered, for the patient, and for the sanitary system and for the society, the laparoscopic surgical techniques may and have to be implemented in the therapeutic algorithym of this pathology.
5. From the study of the incidence on age groups results the

smaller incidence at the age group over 70 years with 7 patients (4,22%) and at the age group of 24-30 years with 5 patients (3,01%).

6. From the study of the incidence of the cervix cancer in accordance with the degree of parity, results that the secundipares and the multipares totalize over 80% of the cases.
7. From the effectuated researches, results that the incidence reported to the age, parity degree and clinical stadiality for the patients from the research lote were similar to the literature data, regarding the mentioned aspects.

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