

# Quality Of Life Of The Patients With Ovarian Cancer

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## Abstract

**PURPOSE:** The goal of this research is the analysis of the quality of life of the patients with advanced ovarian cancer in the period after radical surgery and chemotherapy. **PATIENTS AND METHODS:** 60 patients with advanced ovarian cancer who underwent radical surgery in the time period 2008-2009 at the University Clinic for Obstetrics and Gynecology "Narodni Front" and after that received adjuvant chemotherapy were selected for this research. The patients filled out the Short Form-36 (SF-36) Health Survey Questionnaire, the EORTC Quality of Life Questionnaire C30 (QLQ-C30) and Hamilton questionnaire. **RESULTS:** Based on the SF – 36 questionnaires, it has been calculated that the score for general health of the patients equals 56.03. The physical role and emotional role have received the lowest scores, of 23.33 and 26.66 respectively. Based on the QLQ-C30 questionnaire, it has been determined that one third of the patients had assigned the lowest possible score. The average score for depression was 8.9 out of 26, and 10.81 out of 24 for anxiety. **CONCLUSION:** The analysis of the quality of life of the patients during the disease can point to symptoms, i.e. factors leading to deterioration in the quality of life. Timely recognition of these factors and taking preventive measures could have positive influence on improving the quality of life during the disease.

## INTRODUCTION

Ovarian cancer is one of the ten most frequent malignant tumors in female population. Particular importance lies in fact that this tumor has high rate of mortality. Every year there are 204000 new cases of this cancer worldwide while 125000 women die every year [1]. Ovarian cancer accounts for 4-5% of all malignant tumors in female population and participates with 4.2% in mortality structure. In developed countries share of ovarian cancer is 28.7% in all female genital tract tumors. References often refer to ovarian carcinoma as the gynaecological killer "number one" in modern world [2].

Malignant ovarian tumors are considered to be among the worst problems in gynecological oncology because of the lack of screening methods, impossibility of early detection, unspecific symptoms of the disease, extremely malignant course and high mortality rate.

During the period of treatment, remission or relapse of the disease, the patients face the symptoms of the disease on a daily basis, which affects their psychological, social and emotional state, having influence on the quality of their own lives and the lives of their families. For this reason, attention is increasingly devoted to the improvement of the quality of the patients' lives during the treatment and remission. In order to gain insight into the most common psycho-somatic

symptoms influencing the quality of life, questionnaires adapted to all social groups of patients have been developed. The questionnaires have been validated and are already in use in most major oncological centers in the world – the patients fill them out before each medical procedure, therapy or check-up. In this way, a broader analysis of the quality of life is started, with the goal of defining the problems in each individual case, in order to act on them and improve the quality of the patients' lives during the disease and its treatment [3].

In this way, it is possible to evaluate the quality of life during therapy, and subsequently, during the remission periods, and plan medical treatment which would have positive effect on the quality of life, or at least prevent the aggravation of the quality of life of the patients in the advanced stages of the disease [4].

The goal of this research is the analysis of the quality of life of the patients with advanced ovarian cancer in the period after radical surgery and chemotherapy.

## PATIENTS AND METHODS

60 patients with advanced ovarian cancer who underwent radical surgery at the University Clinic for Obstetrics and Gynecology "Narodni Front" in the time period 2008-2009 and after that received adjuvant chemotherapy were selected

for this research. The patients filled out the Short Form-36 (SF-36) Health Survey Questionnaire, the EORTC Quality of Life Questionnaire-C30 version 3.0 (QLQ-C30) and Hamilton questionnaire, under the supervision of researchers, without time limitations. The statistical analysis of the collected data was performed afterwards, and it included data entry, recoding, calculating the basic scoring scales, transformation of the basic scales into 0-100 scales. At the end of the statistical data processing, score verification was performed to eliminate the possible errors which could have occurred during data entry, programming and processing, leading to incorrect scale score. Higher scores denominate better quality of life. The results obtained are shown in diagram format.

## RESULTS

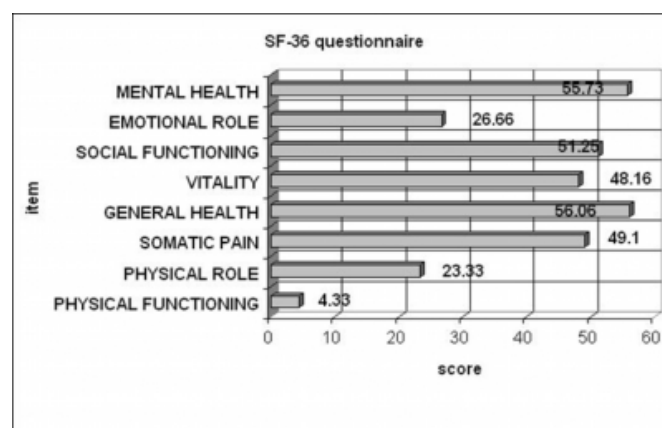
Reliability of measurement tools and internal consistency of the questions was performed prior to the analysis of the quality of life based on the health questionnaires. Reliability was tested using Cronbach analysis. High value of Cronbach's alpha coefficient was noted for each questionnaire analyzed. For SF-36  $\alpha = 0,844$ , for QLQ-C30  $\alpha = 0,708$ , for Hamilton's scale of depressiveness  $\alpha = 0,717$  and for Hamilton's scale for anxiety  $\alpha = 0,739$ . High values of Cronbach's alpha coefficient testify to the questionnaires' reliability.

### THE SHORT FORM – 36 (SF-36) HEALTH SURVEY QUESTIONNAIRE

SF-36 health questionnaire is a general health questionnaire developed to measure eight most important items with eight groups of questions. The following items were measured: physical functioning, physical role, somatic pain, general health, vitality, social functioning, emotional role and mental health. The following diagram shows how the patients rated their general health, according to the results of SF-36 questionnaire (please refer to diagram 1).

**Figure 1**

Diagram 1. SF-36 health questionnaire.



The physical and emotional roles have the lowest scores: 23.33 and 26.66 respectively. As many as 70% of the patients rated their physical role with a zero, while 63.3% of the patients rated their emotional role with a zero.

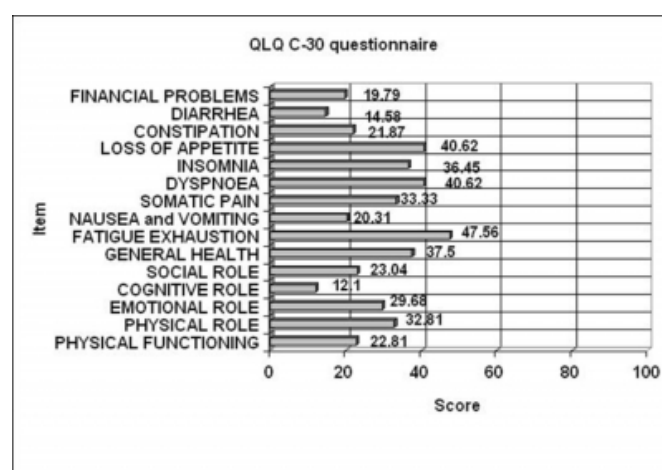
Although general health has the highest score, it is only 56.03. This score is practically in the middle of the scale, which means that general health is rated as mediocre.

### THE EORTC QUALITY OF LIFE QUESTIONNAIRE C30 (QLQ-C30)

QLQ-C30 questionnaire has been designed specifically for cancer patients. The following diagram shows how the patients rate their health in the items measured by QLQ-C30 (please refer to diagram 2).

**Figure 2**

Diagram 2. QLQ C-30 questionnaire.



The lowest score, i.e. zero for physical functioning was present in 21.9% of the patients, while zero score for physical role was present in 18.8% of the patients. The zero score for the social role was present in almost one third of

the patients (28.1%), while 12.5% of the patients rated their emotional role as zero. As many as 56.3% of the patients assigned zero value to their cognitive function.

Zero score for nausea and vomiting was present in as many as 40.6% patients. Exactly the same percentage of patients (40.6) assigned zero to loss of appetite and insomnia. As many as 59.4% rated their problems with constipation with zero, while 71.9% did so for diarrhea. Zero score for somatic pain was present in 15.6% of the patients, and 28.1% for dyspnoea. 65.6% of the patients assigned the value of zero to their financial problems.

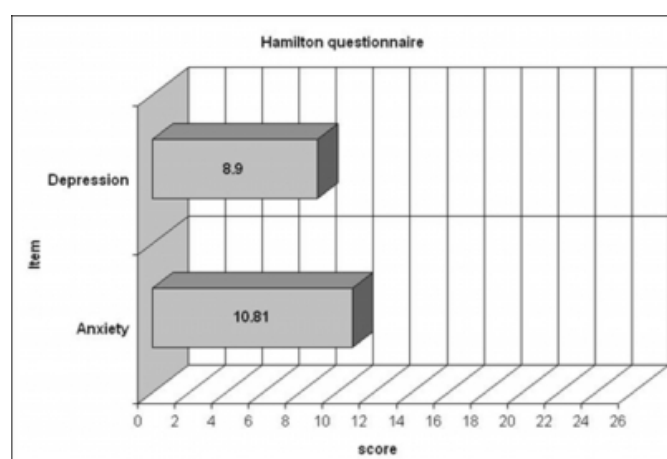
Apparently, one third of the patients reported that their physical functioning, social role and emotional role were equal to zero, i.e. very poor. More than one third of the patients complained about nausea, vomiting and loss of appetite. As many as 59.4% assigned zero to constipation and 71.9% to diarrhea, which is also very poor. 21.9% of the patients assigned zero to their general health, while 12.5% of the patients rated their general health as mediocre.

### HAMILTON – EVALUATION OF ANXIETY AND DEPRESSION

The degree of anxiety and depression was evaluated using the Hamilton's questionnaire. The results are given in the following diagram (please refer to diagram 3).

**Figure 3**

Diagram 3. Hamilton questionnaire



The average score for depression was 8.9 (the maximum score is 26) while the average score for anxiety was 10.81 (the maximum score is 24), which means that the patients were more or less depressed and anxious about their health.

### DISCUSSION

Treatment of ovarian cancer includes radical surgery with

maximal cytoreduction which is a very complex and difficult operation with long postoperative recovery, during which patients must deal with facts about spreading of disease, prognosis and survival. Painful symptoms of malignant disease thus acquire an additional dimension - emotional, i.e. psychological dimension, which is connected to subjective preoccupations about further treatment, discomforts, continuing life with disease, loss of reproductive function (in younger patients), but also about death, which in a special way enlarges already present symptoms and discomforts. According to literature, more than 40% of women survive more than five years [5]. This practically means that, during period of treatment, remission or relapse, these patients have to deal with symptoms of disease every day, which can change their psychological, social and emotional condition, affecting significantly not only quality of their life but of their family members as well.

This study indicated that subjective rating of life quality of our patients is between bad and average values on analyzed quality life scale.

Analysis of results acquired from SF-36 questionnaire showed that physical (23.33) and emotional part (26.66) have the lowest score. 70% of patients had physical part score equal to zero while 63.3% patients graded their emotional part with zero. Analysis of results QLQ-C30 questionnaire concluded that patients complain the most about nausea, vomiting, diarrhea, constipation, exhaustion and fatigue, and that these discomforts significantly affect life quality and change part of physical functioning as well as emotional part. High rate of depression and anxiety is acquired by analysis of results of Hamilton questionnaire, which in addition amplifies psychological component which completely changes life quality of these patients.

The analysis has shown that the quality of life of the patients in advanced stages of ovarian cancer was rated either as mediocre or poor, the patients are experiencing deterioration of their physical, emotional and psychological function, which further impairs their normal functioning and contributes to worsening of their quality of life during the treatment period.

According to data available from references about the quality of life of the patients during all phases of the disease point to a significant drop in all items measured by the questionnaires about the quality of life [ 6, 7, 8, 9, 10,11].

Evaluation and identification of all factors influencing the

quality of life of ovarian cancer patients could help in overcoming the difficulties and symptoms connected with them, and thus contribute to the improvement of the quality of life of the patients during the survival period.

This is why in recent years a trend is present in the world literature which calls for analysis of the quality of patient's life in each phase of the disease, with special emphasis on the dynamics of deterioration of quality of life. It is also important to analyze the factors which cause this deterioration, in order to be able to act preventively upon these factors, i.e. to influence in a positive way the improvement of life quality during all phases of the disease or survival period.

Examination of the quality of life during each phase of the disease may inform the physician of the development of the symptoms which trouble the patient most, in order to prevent them to the extent possible. In this way, a positive influence on the quality of life could be made, with the aim of its improvement during the survival period.

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