

The importance of life quality questionnaire in patients with prostate cancer, pre- and post-radical prostatectomy

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Abstract: *This study analyzes the satisfaction of the patients with radical prostatectomy according to the signs and symptoms included in the EORTC QLQ – C30 and EORTC QLQ – PR25 questionnaires, including their relation with the health state that influences the pre and postoperative life quality.*

Fifty patients with prostate cancer in a localized stage were studied and analyzed in a prospective manner and for a period of 12 months, before and 6 months after the radical prostatectomy. In choosing the patients, the common denominator was the use of the same postoperative plan and the lack of postoperative complications, as well as the lack of chronic diseases.

Erectile dysfunction, urine incontinence were quite frequent after radical prostatectomy, while the urinary obstruction and the weak urinary stream were less frequent. In this regard, people noticed a significant decrease of life quality.

Although the study addressed a small group of patients, the results are similar to those belonging to other clinical studies. Even if the aspect of life quality is more rarely taken into account, the questionnaires regarding the life quality are specific, useful and quite cheap in evaluating different therapies.

Keywords: *life quality, prostate cancer, questionnaire*

INTRODUCTION

Prostate cancer represents a disease with increased prevalence, being the second cause of death in U.S.A, on the first place being the lung cancer. However, the prostate cancer shows optimistic survival rates, the rate of the deaths caused by the prostate cancer decreased in the U.S.A, from the beginning of 2007 with 3.2%[4]. This fact led to the appearance of a model of patients with prostate cancer, patients for whom the quality of life is important, as well as the impact of the disease on this.[5].

For those who study the clinical problem, the aim of evaluating life at the patients with prostate cancer consists in evaluating the effects of the treatment on the symptoms and in identifying the negative impact of the disease on the life of the patient.

The quality of life is a concept that has started to be studied and taken into account in 1946 when in the

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Preamble of the Constitution of World Health Organization, health was defined as it follows: „Health is the state of complete physical, mental and social wellbeing that does not reduce at the absence of a disease or of an infirmity”[1,2].

Smith and his contributors consider the notions of life quality and the health as being two defined concepts, the life quality being related even more to the mental health, while the state of health hints at the physical function [3].

Meaning „a holistic auto evaluation of satisfactions regarding the individual”, the life quality is a much – disputed concept, multidimensional that, though seems quite easy to understand it, is difficult to be defined.

In a more restrictive meaning is used the term of life quality regarding health „health related quality of life” (HRQL), to define the influence of health and nursing on the life quality, being influenced by numerous factors like: financial state, habitat, the work place, the spirituality, the social support and the health of the individual [2].

The evaluation of the aspect regarding the quality of life in patients with prostate cancer is done at a large scale in the clinical studies, but it must be underlined the importance of using these evaluation methods in clinical practice [1].

The questionnaire, a descriptive instrument, is the one through which the evaluation is done in a subjective manner a wide range of the disease effects that are, later, resumed into a final score.

The evaluating instruments of the quality of life come to complete the other methods of investigation of the patient with prostate cancer, for this very reason it would be opportune to facilitate the use of these by the people who study clinical problems, the subsequent therapeutic conduct being able to improve the quality of life for these patients.

The most used questionnaires in the clinical practice in evaluating the patients with prostate cancer are the following: EORTC QLQ-PR25 and EORTC C-30 questionnaires.

The quality of life as a medical concept explains the

effects of diseases and those of the therapy on the stage of comfort for the patient that is the subject of evaluation with the help of the questionnaires.

The questionnaires can be completed by the medical personnel, the patient being asked the questions after having read and signed the informed consent or directly by the patient.

The first method has the advantage that the doctor can explain the patient the questions more accurately, diminishing the misunderstandings, but the result cannot have a maximum accuracy as not all the patients can be very honest while facing other persons.

MATERIAL AND METHOD

Fifty patients with prostate cancer in a localized stage were studied prospectively for 12 months, before and at 6 months after the radical prostatectomy between January 2015 – December 2015, at the Urology Clinic of the Carol Davila Central Military Hospital.

In choosing the patients, the common denominator was the use of the same postoperative plan and the lack of postoperative complications, as well as the lack of chronic diseases.

The average age of the patients included in study was of 65.

The patients were asked to fill in the EORTC C-30 and EORTC QLQ-PR25 in Romanian language, after having read and signed the informed consent.

The characteristics of the group of patients were recorded and processed in a SPSS database (version 22 – Chicago k, USA).

The EORTEC C – 30 questionnaire has 30 questions that shows us a pre and postoperative image of the patient, regarding the cognitive, emotional, social functions or regarding the signs and symptoms of the patients, using a scale with more items or singular ones.

The questionnaire, excepting the two last items, can be completed with values between 1 and 4, so, (A) the absolute amplitude of the variation of answer is 3. The scale of life quality is given by the answers at

the questions 29 and 30 at which the patients can choose values from 1 to 7, the absolute amplitude being of 6.

Items	Number of items	Number of question
Physical state	5	1 - 5
Daily activities	2	6, 7
Emotional states	4	21 - 24
Cognitive functions	2	20, 25
Social and family relations	2	26, 27
Tiredness	3	10, 12, 18
Nausea and Vomiting	2	14, 15
Pains	2	9, 19
Dyspnoea	1	8
Insomnia	1	11
Anorexia	1	13
Constipation	1	16
Diarrhea	1	17
Financial problems	1	28
General health state	1	29
Life Quality	1	30

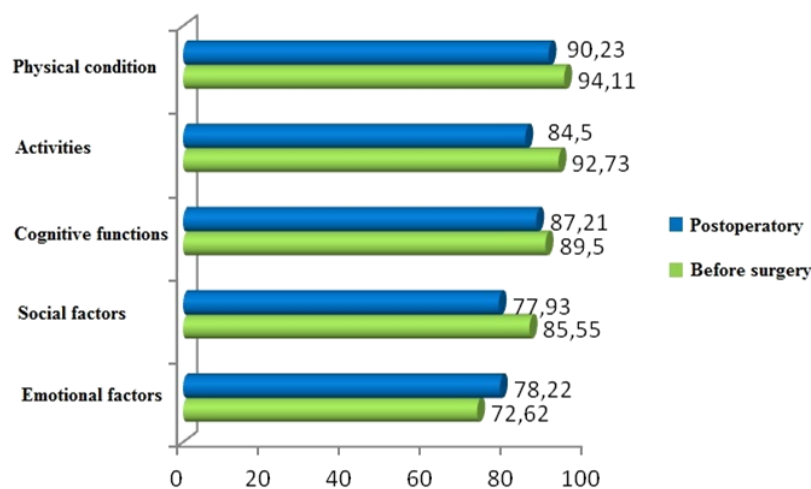
To analyze the questionnaires I used a different formula for functions, namely: $Value_functions = 1 - ((Raw\ score - 1)/Absolute\ Amplitude)*100$ comparing to $Value_symptoms = Raw\ score - 1/Absolute\ Amplitude)*100$.

As a result, I noticed that a higher value of the functions shows a higher rate of functionality and independency, while a higher value of the symptoms shows problems of dependency of the patient.

One can notice in the chart that, only emotionally, the patient feels better after 6 months after surgery. I must mention that the younger patients (<65 years old), consider that, physically and socially speaking, they were better during the preoperative period.

The indicator of the physical state is made up of 5 items: the resistance of hard activities, independency in dressing and eating, as well as the chronicle tiredness and the need of laying in bed. From the questionnaire, one can see that the physical resistance of the patient decreased from 94.11 to 90.23.

Figure 1: Score of life quality regarding functions



One can see an increase of tiredness after prostatectomy, from 11.1 to 16.2 and, also in the symptoms of nausea and vomiting.

The postoperative pain had a significant increase from 10.33 to 12.22.

The tiredness increases proportional with insomnia and the sensation of weakness, and the pain interferes with the daily activities especially at the patients of more than 65 years old.

Figure 2: Score of signs and symptoms

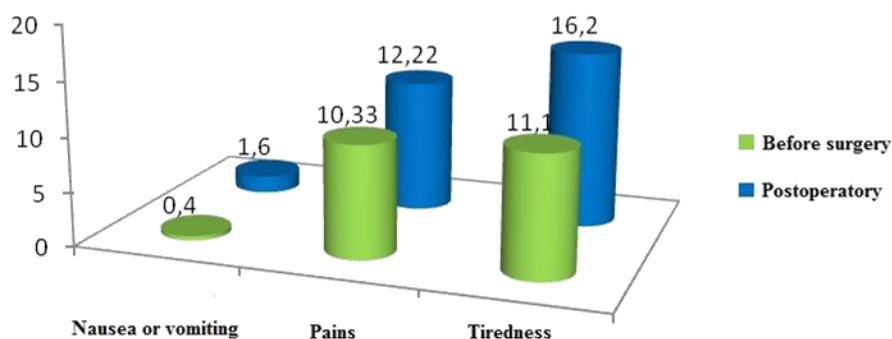


Figure 3: Signs and symptoms

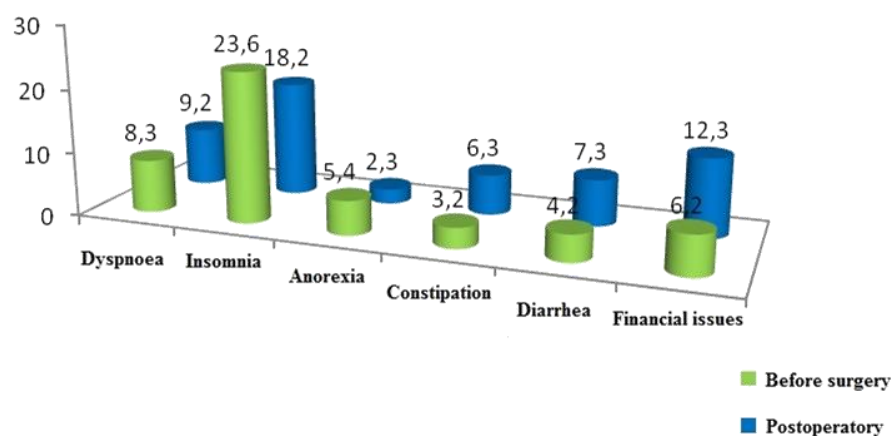
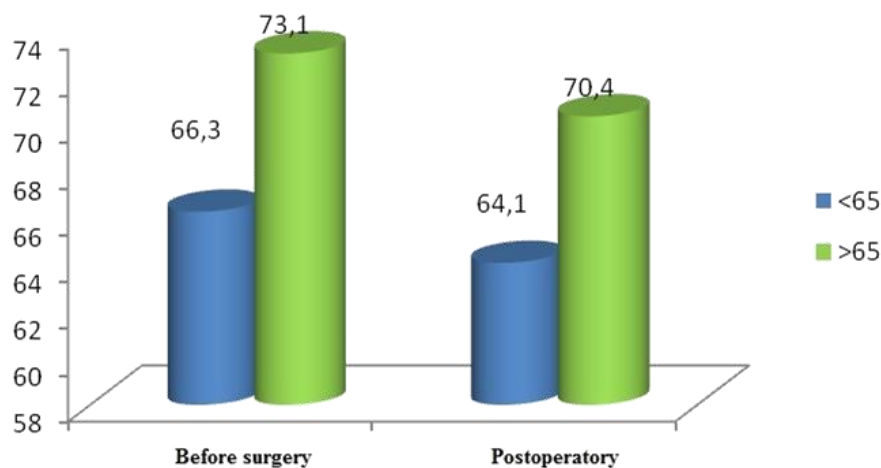


Figure 4: Quality of life



One can see an improvement of the quality of life of the postoperative patient regarding insomnia and anorexia. The digestive symptoms and the financial problems will accentuate postoperatively especially

at the patients after 65 years old and the younger ones.

The last items are like a conclusion of the questionnaire permitting the patient to define the

last week by the point of view of his health and the manner he sees the quality of his life at a certain time.

Analyzing the data, one can see the most unsatisfied patients on the ground of their physical state and quality of life are the patients younger than 65 years old. Totally, the difference between the quality of life appreciated by people younger than 65 years old pre and postoperative was of 2.2.

Younger patients appreciated the quality of life pre and postoperative lower than the patients of 65 years old.

The EORTC OLO – PR 25 questionnaire contains 25 questions divided into four evaluation functional scales.

Items	Number of items	Number of question
Urinary symptoms scale	9	31-39
Intestinal symptoms scale	4	40-43
Scale regarding the symptoms owing the treatment	6	44-49
Sexual functions scale	6	50-55

The significant differences were regarding the urinary symptoms scale, postoperative 13.86 comparing to preoperative of 7.88. In accordance to the age, there

were differences regarding urinary symptoms scale, those of 65 years old had lower scores, at an average of 9.86.

Regarding the sexual functions scale, those younger than 65 had higher scores, at an average of 10.11 units.

The erectile dysfunction appears in a degree of 67% at different levels, while 34.9% shows no affliction of the erectile function.

In the postoperative group 23% presented with mild incontinence while severe and moderate incontinence was present in 4, 7% of the patients.

Postoperatively the frequency of the urinary incontinence was greater in patients older than 65 than those younger than 65.

CONCLUSIONS

To identify the type of treatment is vital for the success of the oncologic therapy of the prostate cancer, though the complications appeared after a radical prostatectomy influences the life quality of the patient. One of the objectives in carrying about patients is in helping at stabilization of the urinary continence and of sexual function, in improving the life quality of the patient. A more critical evaluation of the type of treatment is essential for developing an efficient strategy.

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