

AGE STRUCTURE IN ONCOLOGICAL DISEASES IN GYNECOLOGY

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Abstract: This article presents data on the age structure of robot-assisted surgery operated on in patients with gynecological oncological diseases in Bulgaria over a two-year period. Aim: to determine the incidence of oncological diseases in gynecology by age groups and to calculate the growth rate of morbidity by age, in order to extrapolate for evaluation for a future period. Method: Statistics on robot-assisted robot-assisted surgery in gynecology from a two-year period in oncological diseases were used. Results: out of a total of three hundred and eight cases studied, the largest number of cases of oncological diseases in gynecology were registered in the age group from fifty-two years to sixty-one years, followed by the age group from sixty-two years to seventy-one years and the age group from forty-two to fifty-one years. The decline in morbidity over the age of eighty is explained by natural demographic reasons. Discussion: between the ages of forty-two and seventy-two, two physiological periods overlap with a predominance of cancer, respectively - hormonal changes and geriatric changes. Probable causes are delayed metabolism and decreased immune function, increasing age and the influence of external environmental factors such as radiation. The latter may be a lifelong factor, but the weakening of the immune system is a breakthrough in its impact. Conclusion: the age structure of tumors in gynecology marks an uneven distribution of cases by age, peaking around the sixties, based on the influence of internal factors transition from reproductive to geriatric age.

Keywords: gynecology, tumors, robot-assisted surgery, gerontology, hormones

1. INTRODUCTION

The increase in mortality from oncological diseases in gynecology poses a number of challenges to the health system, such as: cancer prevention, methods of treatment and search for new surgical techniques, detection of diseases at an early stage. This article presents data on the age structure of robot-assisted surgery operated on in patients with gynecological oncological diseases in Bulgaria over a two-year period. The question arises about the presence of factors - causes of cancer in gynecology, which have not been presented so far and are the subject of extensive future research in the context of gerontology and social gerontology.

The purpose of the study is to determine the incidence of cancer in gynecology by age groups and to identify the determining factor.

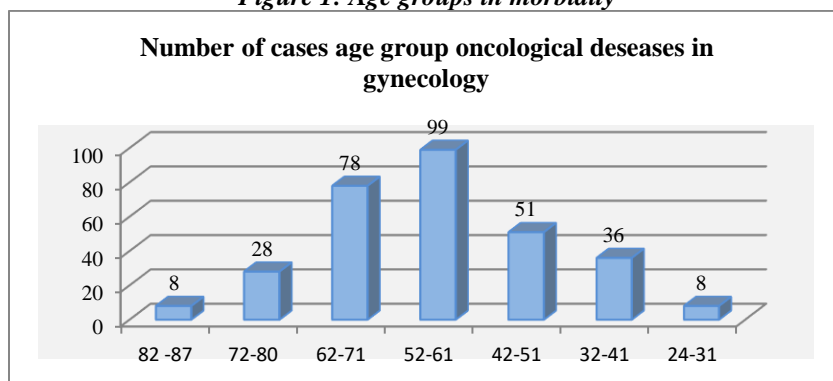
2. METHOD

Statistics on the operative activity through robot-assisted surgery in gynecology from a two-year period in oncological diseases were used.

3. RESULTS

A total of three hundred and eight cases of oncological diseases in gynecology were studied for a period of one year. The cases are grouped by age, covering one decade. The creation of groups covering shorter periods of time makes it possible to avoid or reduce the influence of external environmental factors and internal factors responsible for the change caused by the biological and physiological processes of the organism (Figure 1).

Figure 1: Age groups in morbidity



The highest incidence of oncological diseases is reported in the age group of "52-61" - 99 cases. Followed by: the group "62-71" - 78 cases, the group "42-51" - 51 cases, the group 32-41. - 36 cases, the group of 72-80 years - 27 cases and the two final age groups: "82-87 years" and 24 years-31 years - 8 cases each.

4. DISCUSSION

Figure 1 shows a gradual increase in the incidence of oncological diseases in gynecology with age, as in the two final groups of ages "24-31" and "82-87" the values are the same and minimal compared to those in other age groups. With regard to access to surgery, cases of all ages have equal rights to treatment. With regard to the management of the system, it is important to answer the question: "Which age groups should be given the most attention without ignoring the others? Where exactly does "refraction" take place, ie. at what age the efforts and resources for the impact of the health system should be concentrated and the reasons for this.

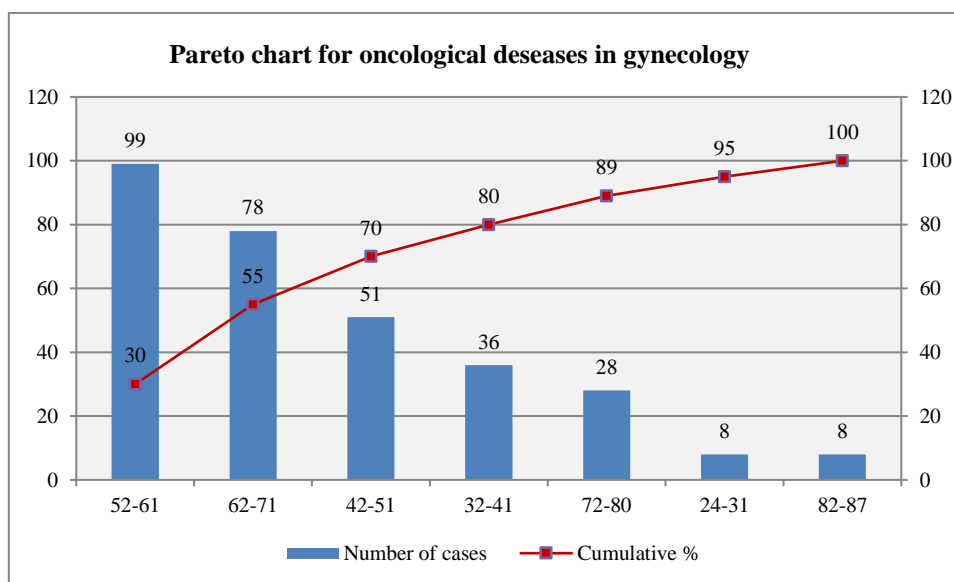
Table 2 is compiled, which contains the number of cases by age groups, the percentage by age groups, the cumulative frequency by age groups and the cumulative percentage by age groups. Age is considered to be the determining factor in the incidence of gynecological cancer (Table 1).

Table 1: Cumulative percentage table

Age group - years	Number of cases	%	Cumulative frequency	Cumulative %
52-61	99	30	99	30
62-71	78	25	177	55
42-51	51	16	228	70
32-41	36	10	264	80
72-80	28	9	292	89
24-31	8	6	300	95
82-87	8	6	308	100

Based on Table 2, a Pareto diagram is drawn, shown in Figure 2.

Figure 2: Pareto diagram of the incidence of cancer in gynecology, by age



Pareto chart for oncological diseases in gynecology

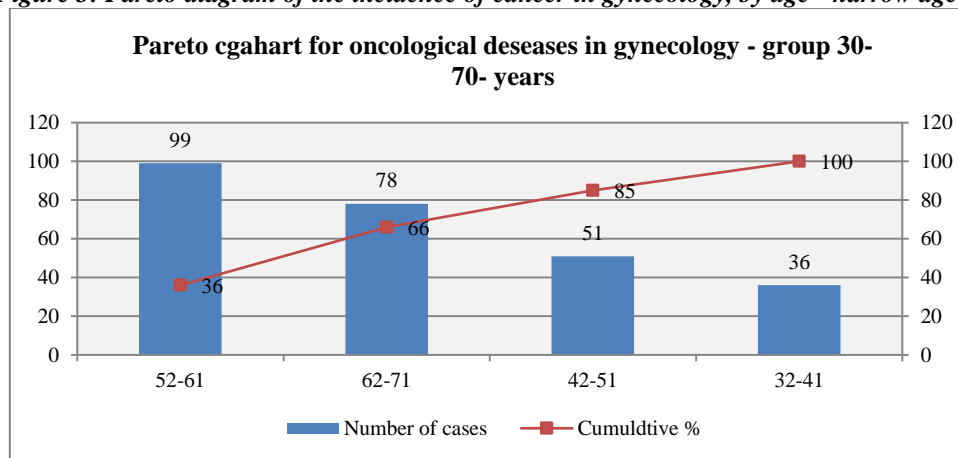
The Pareto chart shows that eighty percent of cases of cancer in gynecology occur between the ages of thirty and seventy. When applying the Pareto analysis in this narrow age range, it was found that eighty percent of cases of cancer in gynecology are in the age group between forty years and seventy years (Table 2 and Figure 3).

Table 2: Table for compiling a cumulative percentage in a narrow age range.

Age group - years	Number of cases	Cumulative %
52-61	99	36
62-71	78	66
42-51	51	85
32-41	36	100

Based on the data in Table 2, a Pareto diagram is drawn (Figure 3).

Figure 3: Pareto diagram of the incidence of cancer in gynecology, by age - narrow age ran



The reasons for the "refraction" in the health of patients should be sought in the physiological reorganization of the body, as well as external factors.

According to the theory of gerontology, in the forties the individual undergoes destructive processes, which are still stopped by resistance, recovery processes, etc. "Vitauk". In the studied age groups, on the one hand, there are factors such as aging of the gonads and thalamus, and on the other - the immune system, the weakening of which triggers cancer. These physiological causes, combined with the social environment and quality of life of patients, as well as the genetic basis form a multifaceted problem.

5. CONCLUSION

The problem of the incidence of oncological diseases, related to the age groups and specifically to the lower ones, should be addressed in the context of gerontology and studied by its subject and methods.

A long-term cohort study is needed to track factors such as age, morbidity (concomitant diseases), many of the social factors involved in the quality of life of patients, as well as the relationship of patients with the health system.

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