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TABLE OF CONTENTS

AGRICULTURAL SCIENCES

1. *Stoliar S., Trembitska O.* 9
INTRODUCTION OF VALUABLE NICHE CROPS IN POLISSIA FOR VISUAL NUTRITION
2. *Бердін І. В.* 16
ОСОБЛИВОСТІ ФОРМУВАННЯ ВРОЖАЮ СОНЯШНИКА ЗАЛЕЖНО ВІД ГУСТОТИ ПОСІВУ

MEDICAL SCIENCES

3. *Glubochenko O.* 23
DRUG-INDUCED RAYNAUD'S SYNDROME
4. *Kubrak M. A.* 28
CHANGES IN THE HEALTH STATUS OF PATIENTS WITH COMPLICATED FORMS OF COLON CANCER IN THE PERIOPERATIVE PERIOD
5. *Савка С. Д., Савка С. І.* 31
ВЗАЄМОЗВ'ЯЗОК СЕРЦЕВО-СУДИННОЇ ПАТОЛОГІЇ ТА КЛІНІКО-ПСИХОПАТОЛОГІЧНИХ ОСОБЛИВОСТЕЙ ДЕПРЕСИВНОГО РОЗЛАДУ

CHEMICAL SCIENCES

6. *Гудков А. Є.* 36
СПОСОБИ ОЧИСТКИ ОРТОФОСФОРНОЇ КИСЛОТИ З ЗАСТОСУВАННЯМ ОРГАНІЧНИХ ЕКСТРАГЕНТІВ І ІОНООБМІННИКІВ

TECHNICAL SCIENCES

7. *Tuzelbayev Asset, Amanali Bekbolat* 39
THE EVOLUTION OF ARTIFICIAL INTELLIGENCE: FROM EARLY ALGORITHMS TO DEEP LEARNING AND NEURAL NETWORKS
8. *Bezvesilna O., Nechai S.* 44
STUDY OF THE INFLUENCE OF THE AMPLITUDE VALUES OF VIBRATION ACCELERATIONS AND THE DAMPING COEFFICIENT ON THE OPERATION OF A BALLISTIC GRAVIMETER
9. *Cheverda A., Artym V.* 51
IMPACT OF SRPUS ON ENVIRONMENTAL SAFETY
10. *Danyliuk N., Artym V.* 57
IMPACT OF CORROSIVE ENVIRONMENTS ON THE DURABILITY OF DRILLING EQUIPMENT AND METHODS FOR PROTECTION
11. *Gordiienko S. M., Veligotska Yu. S.* 65
LANE CAPACITY ESTIMATION OF URBAN STREETS AND ROADS BASED ON THE AVERAGE VEHICLE SPEED

**CHANGES IN THE HEALTH STATUS OF PATIENTS WITH
COMPLICATED FORMS OF COLON CANCER
IN THE PERIOPERATIVE PERIOD**

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Abstract. The health status of 71 (100 %) patients treated in the surgical department for complicated forms of colon cancer was analyzed according to the CR-POSSUM scale. At the stage of hospitalization, the average score for the physiological subscale (PS) was 10.62 ± 3.04 points, and for the surgical subscale (SS) - 10.82 ± 2.78 points.

The risk of mortality was 6.40 (3.50; 19.10) %. According to the results of reassessment one day after the intervention, the mean score for PS was 11.73 ± 3.07 points, $T = 87.00$; $p < 0.0001$. The score for SS was 10.81 ± 2.67 points, $T = 2.00$; $p = 0.5930$. The risk of mortality was 11.60 (4.80; 21.20) %, $T = 55.00$; $p < 0.0001$. Before discharge, the mean score for PS was 10.63 ± 2.91 points, $T = 370.00$; $p = 0.3082$. For SS, the score was 10.74 ± 2.66 points, $T = 2.00$; $p = 0.4660$. The risk of mortality was 8.10 (3.40; 16.30) %, $T = 345.00$; $p = 0.2679$. Thus, in patients with complicated forms of colorectal cancer, the health status significantly worsens one day after surgery according to the PS of the CR-POSSUM scale ($p < 0.0001$), which leads to an increased risk of postoperative mortality in patients in this category ($p < 0,0001$).

Keywords: cancer, colon, complications, diagnosis, prognostic scales, CR-POSSUM.

Abstracts

Complicated forms of malignant tumors of the large intestine occupy a leading place in the structure of urgent surgical pathology of general surgical hospitals.

The aim of the study

To analyze the perioperative changes in the health status of patients who underwent surgery for complicated forms of colon cancer in a general surgical hospital using the prognostic scale CR-POSSUM.

Materials and methods

We analyzed the data of 71 (100%) patients who were treated in the surgical department. The study group included 36 (50.71 %) men and 35 (49.29 %) women, with an average age of 67.97 ± 12.71 years.

All patients were operated on within a mean time of 8.2 (5.00; 15.50) hours from the moment of hospitalization. The average length of stay in the hospital was 14.00 (11.00; 17.00) days.

In the study group, there were 8 (11.27 %) deaths, of which 1 (12.50 %) patient died as a result of pulmonary embolism, 5 (62.50 %) patients died as a result of acute heart failure with pulmonary edema, and 2 (25.00 %) patients died as a result of multisegmental pneumonia.

According to the results of the examination at the preoperative stage, on the first day of the postoperative period and before discharge from the hospital, to predict the risk of postoperative mortality, as well as to compare changes in the condition of patients before and after surgery, patients were assessed by the CR-POSSUM scale (ColoRectal Physiologic and Operative Severity Score for the enUmeration of Mortality, Copeland G., et al., 1991; Whiteley M. et al., 1996).

Results

At the stage of hospitalization, the average score for the physiological subscale of the CR-POSSUM scale was 10.62 ± 3.04 points, for the surgical subscale 10.82 ± 2.78 points. The risk of mortality at the time of hospitalization of patients with complicated forms of colon cancer was 6.40 (3.50; 19.10) %.

According to the results of re-evaluation one day after surgery according to the

CR-POSSUM scale, the average score for the physiological subscale was 11.73 ± 3.07 points, $T = 87.00$; $p < 0.0001$. The score for the surgical subscale was 10.81 ± 2.67 points, $T = 2.00$; $p = 0.5930$. The risk of mortality one day after surgery was $11.60 (4.80; 21.20) \%$, $T = 55.00$; $p < 0.0001$.

According to the results of the assessment of the health status of patients before discharge from the hospital according to the CR-POSSUM scale, the average score for PS was 10.63 ± 2.91 points, $T = 370.00$; $p = 0.3082$. The score for SS was 10.74 ± 2.66 points, $T = 2.00$; $p = 0.4660$. The risk of mortality at the time of hospital discharge was $8.10 (3.40; 16.30) \%$, $T = 345$; $p = 0.2679$.

The mortality rate according to the CR-POSSUM scale in the early postoperative period - $11.60 (4.80; 21.20) \%$ is fully comparable to the actual mortality rate in the group - 11.27% , $p = 0.8943$.

Conclusions

1. In patients with complicated forms of colorectal cancer, the health status significantly deteriorates one day after surgery according to the physiological subscale of the CR-POSSUM scale ($p < 0.0001$), which is primarily due to the depletion of the compensatory capacity of the patient's body.

2. Postoperative changes in the state of health of patients lead to an increase in the risk of postoperative mortality in patients of this category according to the CR-POSSUM scale - $6.40 (3.50; 19.10) \%$ before surgery and $11.60 (4.80; 21.20) \%$ on the first day after surgery, $p < 0.0001$.

3. The risk of mortality according to the CR-POSSUM scale in the early postoperative period ($11.60 (4.80; 21.20) \%$) is fully comparable to the actual mortality rate in the group (11.27%), which indicates a high level of mortality prediction by this scale, $p = 0.8943$.