



Geriatric Aspects Of Acute Surgical Abdominal Pathology

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Abstract

A comparative retrospective and prospective structural nosological and age analysis of acute surgical abdominal pathology based on the results of treatment in the clinic was conducted. There is a significant increase in acute surgical pathology in the older age group, especially with acute intestinal obstruction and acute cholecystitis. This requires a special geriatric approach in the perioperative period, but does not limit active surgical treatment tactics.

Keywords: Geriatrics; Acute Abdominal Diseases of the Abdominal Cavity; Structural Nosological and Age Analysis of Morbidity and Mortality.

Introduction

According to UN forecasts, by 2025, the world population will increase by three times compared to 1950, and the number of elderly people will increase by 6 times, while the number of old people (over 80 years old) will increase by 10 times. According to the classification of the World Health Organization, the category of elderly includes people over 60 years old: 60-75 years old - old age; 75-90 years old - old age [1,2,4]. People who have reached 90 years old are long-lived. The elderly population is a heterogeneous group. In geriatrics and gerontology, the opinion that the physiological and psychological features of older people change significantly every five years is justified. Yes, 60 to 65 year olds have different needs than 65 to 70 year olds; wishes of 70-75-year-olds. differ from the wishes of people 75-80 years old. According to the World Health Organization (WHO), any person who is over 60 years old is considered an elderly person. The number of elderly people (>75 years) is increasing worldwide and exceeds 200 million elderly people [3], and is expected to increase by 30% over the next few years. Ukraine belongs to the demographically old countries of the world. The share of the population over the working age is 23.4%, with a predicted tendency for its further increase. This determines the growth of the socio-economic burden on the able-bodied part of the population and the increase in the number of elderly people who, due to their health, need active support from society. Numerous needs of a medical, social and psychological nature, which are formed with age, determine the need to develop

and implement a state system of comprehensive medical and social assistance measures for the elderly population at all stages of the structural restructuring of the medical (pharmaceutical) industry. The UN General Assembly, in Resolution No. 47/5 of October 16, 1992, set a task for the demographically old countries of the world to develop state strategies development of the system of geriatric care for the population, which is relevant for Ukraine and is provided for in the Concept of Health Care Development, approved by the Decree of the President of Ukraine dated December 7, 2000 No. 1313/2000 and controlled by the Cabinet of Ministers of Ukraine [2].

The main scientific direction today, which studies the patterns of aging of the body and features of old age in particular, is gerontology, the founder of which is considered to be I.I. Mechnikov, having first proposed this term in 1903 in "Studies of Optimism". This is an interdisciplinary science, the main components of which are: biology of aging, clinical gerontology (geriatrics), gerontopsychology, social gerontology (geohygiene, or gerohygiene) [6].

Ukraine belongs to the demographically old countries of the world. The share of the population older than working age is 23.4%, with a predicted tendency for its further increase [3,5]. The UN General Assembly, in Resolution No. 47/5 of October 16, 1992, set the task for the demographically old countries of the world to develop state strategies for the development of the geriatric care

system population, which is relevant for Ukraine and is provided for in the Concept of Health Care Development, approved by the Decree of the President of Ukraine dated December 7, 2000 under No. 1313/2000 and controlled by the Cabinet of Ministers of Ukraine.

Developments and advances in health care and, as a result, increased life expectancy have resulted in elderly patients making up a significant percentage of surgical inpatients. We are now seeing more surgical complications associated with the ever-growing spectrum of pathophysiological changes of aging. To maintain high standards of care for geriatric patients, surgeons face challenges in operative care (comorbidities), anesthesia (intraoperative circulatory depression, cardiac and respiratory failure, and limited metabolism), and intensive care (cardiopulmonary decompensation and circulatory encephalopathy). In contrast to the usually temporary surgical period, an interdisciplinary approach is important during the long perioperative phase of rehabilitation and follow-up care of geriatric patients. In this regard, the relevance of the importance of competence in the field of geriatrics in surgery is increasing. The unique aspects of the elderly and the conditions in which they suffer create a high risk of loss of function, medical complications, and surgical complications in the perioperative period. reduce these risks and maximize functional outcome for the older surgical patient.

The number of patients undergoing major surgery with one or more comorbidities will gradually increase. As a result, the final result determines the level of morbidity, mortality and quality of life, the need for additional diagnostic tests, procedures, means of complex therapy in the preoperative period, and typologies of surgical interventions adapted to individual patients or groups of patients. Strategies for improving results can be divided into several main stages: preoperative assessment; optimization and lack of discontinuation of preoperative drug treatment, mainly in cardiac patients; selection of adequate monitoring methods, checking the state of the patient's metabolism and oxidative balance; choosing the best anesthesia; post-operative care, especially by determining the best management of a critical patient between different levels of care. In conclusion, the comorbid patient scheduled for major surgery requires the full involvement of the anesthesiologist-intensivist, expanding the role of the anesthesiologist in perioperative medicine. Outcome is the result of many interventions during a patient's treatment course, including economic costs and the importance of appropriate treatment.

Materials and Methods

This article presents the results of a structural and etiological analysis of the treatment of patients with a geriatric profile who

were treated in the surgical clinic of the Department of Surgery No. 2 of the VNMU named after M. Pirogov, based in the CNE SCH of the EMC (city clinical hospital of emergency medical care in Vinnytsia). Was conducted analysis of the work of the surgical service for emergency surgical abdominal pathology in the SCH of the EMC for the retrospective period (2011-2015) and the last five years (prospective study - 2019-2023) to determine the trend of urgent conditions and possible ways to optimize the surgical assistance to this contingent of patients.

Results

A comparative analysis of morbidity, general and postoperative mortality was carried out for nine acute surgical nosologies: acute intestinal obstruction, acute appendicitis, acute cholecystitis, strangulated hernia, perforated peptic ulcer, acute pancreatitis, injuries of abdominal organs.

In the period from 2011 to 2015, 5,533 patients were hospitalized for acute surgical diseases of the abdominal cavity (acute intestinal obstruction, acute appendicitis, acute cholecystitis, strangulated hernia, perforated peptic ulcer, acute pancreatitis, injuries of the abdominal cavity), of which 3,383 were operated on. of which 154 people died.

A clinical nosological, gender and age structural distribution analysis of each acute surgical pathology was performed to identify major trends and identify research directions to improve treatment outcomes. The comparative gender and age distribution for each major acute pathology is presented in the charts.

From 2019 to 2023, 6,701 patients with emergency surgical diseases were hospitalized in the surgical hospital of the MKL ShMD. A total of 3,540 operative interventions were performed. According to nosologies, the following were hospitalized: acute intestinal obstruction - 255 (3.8%); acute appendicitis - 1939 (28.9%); burst stomach and duodenal ulcer - 197 (2.9%); gastrointestinal bleeding - 38 (0.6%) (the clinic is not urgent for gastrointestinal bleeding); pinched hernia - 416 (6.2%); acute cholecystitis - 580 (8.7%); acute pancreatitis - 2771 (41.3%); trauma to abdominal organs - 481 (7.2%) and disturbed ectopic pregnancy - 24 (0.37%).

As can be seen, the number of patients with the main acute abdominal surgical diseases remains at a stable level. However, according to some nosologies, the age ratio changes.

Thus, patients with acute pancreatitis, who occupy the first place in the quantitative characteristics of surgical pathology, are dominated by young and middle-aged patients, while patients with acute cholecystitis, strangulated ventral hernias, and, especially, with acute intestinal obstruction - there is a reliable trend towards

an increase in the number old and elderly patients, which significantly worsens surgical indicators in terms of treatment duration and mortality rate.

Acute cholecystitis and pinched hernia make up the second and third steps of the rating of acute abdominal surgical pathology of the Clinic of Surgery No. 2 both in the retrospective and prospective periods of the study, alternating with a small difference in individual years of observation. It should be noted that in the prospective study, the number of patients with a pinched hernia significantly increased (by 21.4%), which indicates that the planned rehabilitation of the hernia under dispensary observation does not take place, or it is insufficient.

As for acute intestinal obstruction, the comparative analysis showed that the number of patients with this pathology increased in relative and absolute terms (by 11.8%), but the gender ratio remained at the previous level, although a reliable trend was noted according to the age criterion towards an increase in the number of geriatric patients.

Abdominal injuries make up a significant percentage of patients in the surgical clinic. The comparative analysis revealed a clear trend of increasing patients with this injury, and in 2019, the number of such patients increased by 49.4% compared to 2011. In this category of victims, young and middle-aged men reliably predominate, which constitutes a major socio-medical problem.

As for perforated ulcers of the stomach and duodenum, the negative dynamics of the increase in patients with this surgical pathology is followed. If in the last years of the last century we noted a decrease in this complication of ulcer disease due to the introduction of the latest effective anti-ulcer pharmacological agents and methods of early diagnosis, then the indicators of recent years indicate an increase in patients with ulcer perforations and late diagnosis of such conditions. Particular attention should be paid to the increase in the number of older and elderly patients.

The conducted analysis showed that the postoperative mortality during this period was: acute intestinal obstruction - 21,75%. Average postoperative mortality - 16.13%), acute appendicitis - 0.3% (average postoperative mortality - 0.23%), perforated peptic ulcer - 16,55% (average postoperative mortality - 11.8%), strangulated ventral hernia - 8.55% (average postoperative mortality - 5.9%), acute pancreatitis - 27.3% (average postoperative mortality - 47.17%), gastrointestinal bleeding - patients were given conservative care, organ injuries abdominal cavity - 30.65%, (average postoperative mortality - 20.1%).

Conclusions

In recent years, the percentage of patients in the older age group has been increasing due to the general trend of population aging in our country.

The largest increase, according to the results of the clinic, is in the group with acute intestinal obstruction. Polymorbidity of older and elderly patients reliably affects the results of treatment of acute abdominal pathology, increasing the length of stay in the hospital and the occurrence of decompensation of concomitant chronic diseases of the cardiovascular, respiratory, and endocrine systems.

In the case of acute surgical pathology, there should be no age restrictions for determining the active tactics of treatment of a specific urgent pathology. In addition to surgeons and anesthesiologists, doctors of related specialties (cardiologists, endocrinologists, neurologists, etc.) should be involved in preoperative preparation of such patients.

The relevance of geriatrics in emergency surgical practice is becoming more and more important every year and requires separate approaches to diagnosis, treatment tactics, management of the perioperative period and prevention of possible complications. Therefore, in the clinic, as part of the research program, pathogenetically based schemes for providing surgical care to patients with a geriatric profile are being developed.

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