

Therapeutic approaches to the management of patients who have undergone abdominal surgery

Enfoques terapéuticos para el manejo de pacientes sometidos a cirugía abdominal

Yana Gadjeivna Maluchieva <https://orcid.org/0009-0001-8563-3194>. yanamylg@yandex.ru

Saratov State Medical University, Street Bolshaya Kazachya 112, 410012, Russia,

Indira Mihailovna Samurieva samurieva99@bk.ru <https://orcid.org/0009-0009-6326-9502>

Saratov State Medical University, Street Bolshaya Kazachya 112, 410012, Russia

Karina Alexandrovna Tantsyeva tantsyeva21@mail.ru <https://orcid.org/0009-0002-8769-1731>

Saratov State Medical University, Street Bolshaya Kazachya 112, 410012, Russia

Murad Javanshirovich Makhmudov <https://orcid.org/0009-0003-2777-2684> murad.maxmudov.2000@bk.ru

Federal State Budgetary Educational Institution of Higher Education «Astrakhan State Medical University» Medical Faculty, 414000, Astrakhan, Bakinskaya str. 121.

Olga Borisovna Golyanova <https://orcid.org/0000-0001-9723-146X> golyanova.olga@mail.ru

Federal State Budgetary Educational Institution of Higher Education «Astrakhan State Medical University» Medical Faculty 414000, Astrakhan, Bakinskaya str. 121

Sharapudin Saudovich Omarov <https://orcid.org/0009-0000-6731-8089> omarovzzz05@mail.ru

Federal State Budgetary Educational Institution of Higher Education «Astrakhan State Medical University» Medical Faculty 414000, Astrakhan, Bakinskaya str. 121

Diana Dmitrievna Lantsman <https://orcid.org/0000-0001-8737-802X> dpustovaya@icloud.com

Federal State Budgetary Educational Institution of Higher Education «Astrakhan State Medical University» Medical Faculty. 414000, Astrakhan, Bakinskaya str. 121

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Abstract

This article examines therapeutic approaches to the care and management of patients who have undergone abdominal surgery. The study focuses not only on postoperative recovery, but also on an integrated approach to ensuring the physical and psychological well-being of patients. The issues of effective control over the process of wound healing, pain management and rehabilitation, including physical rehabilitation and restoration of the functionality of organs that have undergone surgery, are considered. Special attention is paid to the psychological support of patients, since abdominal operations can have a significant impact on their emotional state. The results of the study provide a basis for developing more effective strategies to improve the quality of care and treatment outcomes in this category of patients. The authors also discuss issues related to possible complications after abdomi-

nal surgery and ways to prevent them. In the context of therapeutic approaches, various methods of infection control, diet optimization and rational use of pharmacotherapy to improve the general condition of patients are considered. An important aspect of the discussion is also the individualization of therapy depending on the nature of the operation performed and the characteristics of the patient's disease. This includes developing personalized rehabilitation and care plans that take into account factors such as age, general health, and the presence of comorbidities. In general, the importance of modern therapeutic strategies aimed at optimizing the results of treatment and the quality of life of patients who have undergone abdominal surgery is emphasized.

Keywords: patients, therapeutic approaches, abdominal operations, strategies of care and rehabilitation.

Este artículo examina enfoques terapéuticos para el cuidado y manejo de pacientes sometidos a cirugía abdominal. El estudio se centra no sólo en la recuperación postoperatoria, sino también en un enfoque integrado para garantizar el bienestar físico y psicológico de los pacientes. Se consideran las cuestiones del control eficaz del proceso de cicatrización de heridas, tratamiento del dolor y rehabilitación, incluida la rehabilitación física y la restauración de la funcionalidad de los órganos sometidos a cirugía. Se presta especial atención al apoyo psicológico de los pacientes, ya que las operaciones abdominales pueden tener un impacto significativo en su estado emocional. Los resultados del estudio proporcionan una base para desarrollar estrategias más efectivas para mejorar la calidad de la atención y los resultados del tratamiento en esta categoría de pacientes. Los autores también analizan cuestiones relacionadas con posibles complicaciones después de la cirugía abdominal y formas de prevenirlas. En el contexto de los enfoques terapéuticos, se consideran diversos métodos de control de infecciones, optimización de la dieta y uso racional de la farmacoterapia para mejorar el estado general de los pacientes. Un aspecto importante de la discusión es también la individualización de la terapia según la naturaleza de la operación realizada y las características de la enfermedad del paciente. Esto incluye desarrollar planes personalizados de rehabilitación y atención que tengan en cuenta factores como la edad, la salud general y la presencia de comorbilidades. En general, se enfatiza la importancia de las estrategias terapéuticas modernas encaminadas a optimizar los resultados del tratamiento y la calidad de vida de los pacientes sometidos a cirugía abdominal.

Palabras clave: pacientes, abordajes terapéuticos, operaciones abdominales, estrategias de atención y rehabilitación.

Oral surgery is a widespread method of treating various diseases, including diseases of the abdominal cavity, thoracic cavity and pelvis. Despite technological progress in the field of surgery, effective postoperative recovery and management of patients who have undergone such interventions remain key tasks in modern medical practice¹⁻³.

The purpose of this article is to consider therapeutic approaches to the management of patients after abdominal surgery. Aspects related to the postoperative period, rehabilitation, physical and psychological support will be considered. Special attention is paid to a comprehensive approach that covers not only aspects of physical healing, but also factors affecting the overall well-being and quality of life of patients.

The paper also discusses important issues such as pain control, prevention of complications, individualization of therapy depending on the nature of the operation and the individual characteristics of the patient.

When writing the study, an analysis of literary sources on the topic of the study was carried out, the information obtained was processed through comparative and analytical research methods.

The general characteristics of therapeutic approaches to the care and management of patients who have undergone abdominal surgery include a comprehensive set of strategies and measures aimed at ensuring maximum physical, psychological and social recovery of the patient after surgery. One of the primary tasks is effective control over the healing process of postoperative wounds¹. This includes the correct application of bandages, the use of antiseptics, and regular medical monitoring.

It is also necessary to develop individualized pain management plans to ensure patient comfort and prevent possible complications. It is also important to develop physical therapy programs aimed at restoring the mobility, strength and functionality of organs that have undergone surgery, as well as the development of special dietary plans that meet the needs of the body in the post-operative period².

An integrated approach to the care and management of patients after abdominal surgery covers not only the physical aspects of recovery, but also takes into account psychological well-being. The development of individual physical therapy programs aimed at restoring mobility, strength and functionality of organs that have undergone surgery includes exercises to strengthen muscles, improve coordination and restore overall physical fitness.

One of the directions is to provide patients with special nutrition recommendations that promote healing, maintain energy and provide the necessary nutrients, as well as regular monitoring of the health and functionality of organs in order to timely identify and treat possible complications³.

Providing patients with support and understanding during postoperative stress is also a necessary step. This may include conversations with psychologists, group sessions, or even support from family and loved ones. Patients are provided with the skills to effectively manage stress, combat anxiety and depression. This is important for creating a positive emotional background during the recovery process⁴. Taking into account the psychological characteristics of each patient, personalized support and motivation programs are also being developed, aimed at increasing his self-confidence and successfully overcoming difficulties.

This comprehensive approach not only promotes rapid physical recovery, but also improves the psychological state of patients, which is a key aspect of their overall well-being and quality of life after surgery.

In addition, it is necessary to constantly address the issues of effective monitoring of the wound healing process, pain management and rehabilitation, including physical rehabilitation and restoration of the functionality of organs that have undergone surgery. Methods of effective control over the wound healing process are very important in this context⁵. Thus, aseptic techniques include following strict rules of hygienic treatment of the wound, the use of sterile instruments and bandages to prevent infection from entering the wound area. The use of innovative medical materials such as hydrogels and biological dressings that promote optimal healing, maintain a moist environment and minimize scarring. Constant visual and instrumental monitoring of the wound to identify signs of infection, healing inconsistencies or other problems. The use of telemedicine, mobile applications and remote monitoring to ensure more effective

and timely monitoring of the healing process.

Effective pain management methods are also important, where an individualized approach plays an important role. Here it is necessary to point out such areas of work as the development of unique treatment plans that take into account the type of surgery, the personal characteristics of the patient and his reaction to pain. Multimodal therapy methods should also be used – the use of several methods for pain control, such as pharmacotherapy, physiotherapy and alternative methods, to enhance and synergize the effect⁶. An important factor is the use of pain relief methods in the early stages to prevent an increase in pain syndrome, as well as training patients to use methods of self-control of pain, including the management of dosage of analgesics and the use of relaxation techniques⁷.

The development of unique programs, including exercises and procedures appropriate to the specifics of the operation, the general condition of the patient and his physical fitness, and the use of gradually increasing exercises, starting with light and moving to more intensive ones, to restore strength and mobility, will also contribute to improving the effectiveness of recovery of patients after abdominal operations.

These methods provide a comprehensive and individualized approach to the control of the healing process, pain management and rehabilitation after abdominal surgery.

Discussion

Individualization of therapy after abdominal surgery is an important aspect of patient care. This process is aimed at taking into account the specifics of each specific case in order to ensure optimal recovery and prevent possible complications⁸. Let's consider some general principles of individualization of therapy after abdominal surgery:

1. Assessment of the general condition of the patient. Individualization begins with a thorough assessment of the patient's physical and psychological condition. This includes an analysis of his medical history, current illnesses, allergies, as well as an assessment of the general condition of the body.
2. Taking into account the specifics of the operation. Different surgical interventions may require a different approach to postoperative therapy. For example, gastric surgery may require a specific dietary approach, while heart surgery may require special monitoring of cardiac activity.
3. Analysis of possible complications. Taking into account the risks and potential complications, doctors can

individualize therapy to prevent or minimize these problems⁹. For example, thrombosis prevention may be included in a postoperative care plan.

4. Individual approach to drug therapy. The determination of optimal drug therapy regimens, including analgesics, antimicrobials, anti-inflammatory drugs and others, may depend on the individual characteristics of the patient.

5. Physical rehabilitation. Depending on the type of surgery and the patient's condition, an individualized physical rehabilitation plan may be required to restore mobility and strengthen muscles.

6. Diet and nutrition. Individualization of the diet after surgery may include consideration of the patient's digestive characteristics and dietary preferences in order to ensure proper nutrition and avoid possible problems.

7. Psychological support. After surgery, many patients need psychological support. An individualized approach to providing this support can help manage stress and speed up the recovery process.

Individualization of therapy after surgery requires close interaction between surgeons, anesthesiologists, nurses and other members of the medical team¹⁰. It is important to take into account the specific needs of each patient to ensure the best outcome after surgery.

In order for the care of patients who have undergone abdominal surgery to be effective, it is necessary to take into account and prevent possible complications after abdominal surgery. Postoperative infections may occur due to contamination, non-compliance with aseptic rules, or the presence of other factors. In order to prevent them, it is necessary to use antiseptics, preventative use of antibiotics, and strict adherence to the rules of sterility in the operating room¹¹.

Bleeding from vessels that were damaged during the operation is also possible. Careful hemostasiology during surgery, the use of coagulation agents, and blood pressure monitoring after surgery can prevent this situation. In addition, there is a risk of blood clots in the vessels after surgery, respectively, prevention of thrombosis with the use of anticoagulants, vascular flushing, regular physical activity is necessary.

Complications also include the formation of adhesions in the abdominal or pelvic cavity, which can lead to organ dysfunction. This situation can be prevented by minimizing tissue injuries, the use of barrier means to prevent the sticking of organs. Wound healing may also occur incorrectly, scars may occur, in order to avoid this complication, it is necessary to properly restore the skin, using modern materials for sutures and bandages.

Abdominal surgeries can cause stress, depression and other psychological problems in patients, therefore it is necessary to provide psychological support, inform pa-

tients about the course of treatment, and support from medical staff¹². The anesthesia complex can cause various complications, from allergic reactions to a long recovery time. Careful monitoring of the patient's condition, preliminary risk assessment, and adequate support for the postoperative period are important here.

The systematic use of these methods can significantly reduce the risk of possible complications after abdominal surgery and contribute to the successful recovery of the patient¹³.

To reduce the recovery process of patients after surgical operations, it is necessary to use various infection control techniques, diet optimization and rational use of pharmacotherapy to improve the general condition of patients. It is very important to use antiseptics for the treatment of skin and mucous membranes, as well as disinfection of surgical instruments and surfaces to prevent infections, as well as the rational use of antibiotics in accordance with treatment protocols for the prevention and treatment of infections after surgery¹⁴. It is extremely necessary to place patients with infectious diseases in separate rooms with the use of personal protective equipment.

As part of optimizing the patient's diet, the following measures are necessary:

1. Development of dietary plans that take into account the characteristics of the disease, surgical intervention and the needs of the patient.
2. Maintaining sufficient protein intake to accelerate the healing process of tissues after surgery.
3. The inclusion in the diet of foods rich in vitamins and minerals that promote recovery.
4. The use of high-calorie diets to maintain energy balance and prevent cachexia.

Within the framework of rational pharmacotherapy, it is necessary:

- the use of analgesics to control pain after surgery, taking into account the individual characteristics of the patient;
- rational use of anticoagulants to prevent thrombosis after abdominal surgery;
- preventive use of antibiotics in accordance with protocols to prevent infections;
- the use of probiotics and drugs to support the gastrointestinal tract in order to prevent postoperative complications such as intestinal paresis;
- rational use of anti-inflammatory drugs to control inflammation and reduce the risk of complications.

It is also necessary to highlight a number of problems that arise in the management of patients who have un-

dergone abdominal surgery¹⁵. The lack of individualized approaches to care and therapy can lead to suboptimal treatment results, since each patient has unique needs and characteristics. Layer-by-layer complications, such as infections, remain a serious problem requiring constant monitoring and prevention.

Some patients may experience psychological stress after abdominal surgery, and insufficient attention to psychological support may affect their overall well-being.

The lack of effective physical rehabilitation programs can slow down the recovery process and affect functional results. Insufficient communication with patients about the treatment process, expectations and possible complications can create barriers to understanding and cooperation¹⁶.

Financial constraints may affect access to high-quality treatment and rehabilitation methods. Insufficient training of medical personnel to modern therapeutic methods can lead to ineffective implementation of new approaches.

To solve these problems the following solutions can be proposed:

1. Implementation of effective communication and coordination systems between members of the medical team to ensure holistic and coordinated care.
2. Implementation of methods for assessing individual patient needs to develop personalized therapy and care plans.
3. Implementation of strict protocols for the prevention of infections and postoperative complications, including training of medical personnel and patients.
4. Integration of psychological support into a comprehensive treatment plan, provision of training programs and resources for patients.
5. Creation of effective physical rehabilitation programs taking into account individual characteristics and needs of patients.
6. Development of effective communication strategies with patients, including clear presentation of information and patient participation in the decision-making process.
7. Development of financing models that ensure access to high-quality methods of treatment and rehabilitation for all patients.
8. Regular updating and training of medical personnel taking into account modern therapeutic approaches and technologies¹⁷.

Solving these problems requires the joint efforts of the medical community, administrative authorities and educational institutions. The introduction of these solutions can significantly improve the effectiveness and quality of therapeutic intervention after abdominal surgery.

There are several innovative technologies and approaches in the field of postoperative patient care aimed at improving treatment outcomes and patient comfort¹⁸.

Technologies such as robotic surgery and minimally invasive techniques allow for more precise and less traumatic surgical interventions. This can reduce recovery time and the risk of complications after surgery.

Smartphone apps and other mobile technologies allow patients and healthcare professionals to monitor important health parameters after surgery. This may include vital signs monitoring, medication monitoring, and other aspects of care.

Telemedicine technologies allow patients to receive consultations and medical supervision at a distance. This is especially important for those who cannot physically visit a medical facility during the postoperative period. The use of electronic medical records and data management systems helps to improve the coordination of care and ensures the availability of information for the entire medical team.

In certain cases, robots can be used to perform certain aspects of patient care after surgery, such as distributing medicines, providing food, and also to assist in physical rehabilitation.

Virtual reality (VR) can be used for pain management, as well as as a means of physical and psychological rehabilitation. This can create a supportive environment and help patients overcome movement restrictions. The use of data monitoring and big data analysis systems can help identify warning signs of complications and ensure early intervention.

The analysis of genetic information and other individual factors makes it possible to create personalized care plans, including an approach to postoperative therapy and drug treatment¹⁹.

The integration of these innovative technologies into the practice of caring for postoperative patients can improve treatment outcomes, shorten recovery time and reduce the risk of complications²⁰. However, despite all the advantages, it is important to pay attention to the training of medical personnel and ensure the safety and confidentiality of patient data when using technologies in medical practice.

The critical importance of an integrated approach to the care and management of patients after abdominal surgery underscores the need to integrate medical, psychological and rehabilitation strategies.

The main emphasis on individualization of therapy and care emphasizes the importance of taking into account the unique needs of each patient, including his age, general health and the specifics of the operation performed. Effective monitoring of the postoperative period and prevention of complications, such as infections, are important aspects of ensuring patient safety and optimizing treatment outcomes.

The role of psychological support in the postoperative period is also important, taking into account the emotional aspects associated with abdominal surgical interventions and the need to help patients cope with this stress.

Physical rehabilitation and effective pain management play a key role in restoring mobility and improving the quality of life after surgery. Optimization of diet and rational use of pharmacotherapy contribute not only to healing, but also provide the body with the necessary resources for full recovery.

Thus, a careful combination of medical, psychological and rehabilitation strategies, taking into account the individual characteristics of each patient, creates optimal conditions for successful postoperative recovery and improvement of quality of life.

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