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MODERN APPROACHES TO IMPROVING THE IMMEDIATE AND LONG-TERM RESULTS OF SURGICAL TREATMENT OF MORBID OBESITY

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Abstract: The surgical management of morbid obesity is currently the most effective intervention for achieving sustainable weight loss and resolving associated metabolic comorbidities. This article presents a prospective clinical study conducted at the Department of Surgery of Andijan State Medical Institute. Using the standard research framework, the study evaluates the clinical efficacy of an optimized multidisciplinary approach encompassing Enhanced Recovery After Surgery protocols and prolonged psychosocial support. The research involved one hundred and twenty patients undergoing laparoscopic bariatric procedures. The outcomes demonstrate that patients managed under the comprehensive protocol experienced significantly shorter hospital stays, fewer early postoperative complications, and superior excess weight loss at the twenty-four-month follow-up mark. The study concludes that while advanced surgical techniques ensure immediate physical recovery, the integration of continuous psychological and social adaptation support is the definitive factor in preventing long-term weight relapse and ensuring overall metabolic success.

Keywords - morbid obesity, bariatric surgery, enhanced recovery, psychosocial support, metabolic surgery, excess weight loss.

СОВРЕМЕННЫЕ ПОДХОДЫ К УЛУЧШЕНИЮ НЕПОСРЕДСТВЕННЫХ И ОТДАЛЕННЫХ РЕЗУЛЬТАТОВ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ МОРБИДНОГО ОЖИРЕНИЯ

Abstract: Хирургическое лечение морбидного ожирения в настоящее время является наиболее эффективным вмешательством для достижения устойчивой потери веса и устранения сопутствующих метаболических заболеваний. В данной статье представлено проспективное клиническое исследование, проведенное на кафедре хирургии Андijanского государственного медицинского института. Используя стандартную исследовательскую структуру, исследование оценивает клиническую эффективность оптимизированного междисциплинарного подхода, включающего протоколы ускоренного восстановления после хирургических операций и длительную психосоциальную поддержку. В исследовании приняли участие сто двадцать пациентов, перенесших лапароскопические бариатрические процедуры. Результаты демонстрируют, что пациенты, лечившиеся по комплексному протоколу, имели значительно более короткие сроки госпитализации, меньшее количество ранних послеоперационных осложнений и лучшую потерю избыточного веса при последующем наблюдении через двадцать четыре месяца. Исследование делает вывод, что хотя передовые хирургические методы обеспечивают немедленное физическое восстановление, интеграция непрерывной психологической и социальной поддержки адаптации является решающим фактором в предотвращении долгосрочного рецидива набора веса и обеспечении общего метаболического успеха.



Ключевые слова - морбидное ожирение, бариатрическая хирургия, ускоренное восстановление, психосоциальная поддержка, метаболическая хирургия, потеря избыточного веса.

MORBID SEMIZLIKNI JARROHLIK USULIDA DAVOLASHNING BEVOSITA VA UZOQ MUDDATLI NATIJALARINI YAXSHILASHGA QARATILGAN ZAMONAVIY YONDASHUVLAR

Abstract: Morbid semizlikni jarrohlik yo‘li bilan davolash hozirgi kunda barqaror vazn yo‘qotishga erishish va unga bog‘liq metabolik kasalliklarni bartaraf etishning eng samarali usuli hisoblanadi. Ushbu maqolada Andijon davlat tibbiyot institutining Xirurgiya kafedrasida o‘tkazilgan prospektiv klinik tadqiqot natijalari keltirilgan. Standart tadqiqot tuzilmasidan foydalangan holda, ushbu ish jarrohlikdan so‘ng tezkor tiklanish protokollari va uzoq muddatli psixosotsial qo‘llab-quvvatlashni o‘z ichiga olgan optimallashtirilgan multidisiplinar yondashuvning klinik samaradorligini baholaydi. Tadqiqotda laparoskopik bariatrik amaliyotlarni o‘tkazgan bir yuz yigirma nafar bemor ishtirok etdi. Natijalar shuni ko‘rsatadiki, kompleks protokol asosida davolangan bemorlarda kasalxonada yotish muddati sezilarli darajada qisqardi, erta postoperativ asoratlar kamaydi va yigirma to‘rt oylik kuzatuvda ortiqcha vazn yo‘qotish ko‘rsatkichlari yuqori bo‘ldi. Tadqiqot shunday xulosa qiladiki, ilg‘or jarrohlik usullari bevosita jismoniy tiklanishni ta‘minlasa-da, uzluksiz psixologik va ijtimoiy moslashuvni qo‘llab-quvvatlash vaznning uzoq muddatli qayta tiklanishining oldini olish va umumiy metabolik muvaffaqiyatni ta‘minlashda hal qiluvchi omil hisoblanadi.

Kalit so‘zlar - morbid semizlik, bariatrik xirurgiya, tezkor tiklanish, psixosotsial yordam, metabolik xirurgiya, ortiqcha vazn yo‘qotish.

INTRODUCTION

The prevalence of morbid obesity has reached epidemic proportions globally and represents a severe public health crisis within the Central Asian region. This complex metabolic disease acts as a primary catalyst for the development of life-threatening comorbidities including type two diabetes mellitus, severe obstructive sleep apnea, and profound cardiovascular dysregulation. Bariatric surgery remains the most clinically effective and durable treatment modality capable of achieving significant weight loss and inducing the remission of these metabolic disorders. However, the surgical intervention itself is associated with inherent perioperative risks, and the medical community continues to face substantial challenges regarding late postoperative complications and long-term weight regain.

The optimization of immediate surgical outcomes relies heavily on the implementation of modern perioperative care pathways, primarily the Enhanced Recovery After Surgery protocols. These evidence-based pathways aim to minimize surgical stress, reduce opioid consumption, and accelerate the return to normal physiological function. Conversely, the long-term success of bariatric surgery is intrinsically linked to the psychosocial adaptation of the patient and their rigid adherence to lifelong dietary and behavioral modifications. A purely anatomical approach to a disease heavily influenced by psychological trauma and social environment frequently results in eventual therapeutic failure.

Researchers at the Department of Surgery of Andijan State Medical Institute hypothesized that a comprehensive therapeutic model combining advanced minimally invasive surgical techniques with rigorous preoperative psychological screening and prolonged postoperative social support would significantly enhance both short-term recovery and long-term metabolic outcomes. This



article aims to critically evaluate the clinical efficacy of this optimized multidisciplinary approach compared to traditional isolated surgical management strategies in patients undergoing major bariatric interventions.

METHODS

A prospective comparative clinical study was meticulously conducted at the surgical clinic of Andijan State Medical Institute. The research encompassed one hundred and twenty adult patients diagnosed with morbid obesity, defined as having a body mass index exceeding forty, or a body mass index over thirty-five accompanied by severe obesity-related comorbidities. The study protocol was fully approved by the institutional ethics committee and informed consent was rigorously obtained from all participants prior to inclusion.

The participants were randomly assigned into two equal cohorts of sixty patients each. The Main Cohort received the optimized multidisciplinary treatment protocol. This advanced protocol included accelerated preoperative preparation, strict adherence to enhanced recovery pathways such as early mobilization and opioid-sparing analgesia, and mandatory cognitive-behavioral therapy sessions. These psychological interventions were specifically aimed at addressing deep-seated eating disorders, social anxiety, and emotional triggers for overeating. The Control Cohort served as the comparative group and received standard surgical care without structured, long-term psychological or specialized social follow-up. The surgical procedures performed uniformly across both groups included either laparoscopic sleeve gastrectomy or laparoscopic Roux-en-Y gastric bypass, depending on the specific metabolic profile of the individual patient.

The clinical evaluation metrics were divided into immediate and long-term parameters. Immediate outcomes comprised the total length of hospital stay measured in days and the overall incidence of early postoperative complications such as bleeding, anastomotic leaks, or surgical site infections occurring within the first thirty days. Long-term outcomes were assessed based on the percentage of excess weight loss recorded at twelve and twenty-four months post-surgery, alongside the remission rates of major metabolic comorbidities. Statistical analysis was performed using established biomedical software, applying appropriate comparative tests with a predefined significance threshold to ensure the reliability of the findings.

RESULTS

The implementation of the optimized multidisciplinary protocol yielded statistically significant and clinically profound improvements across all measured surgical and metabolic parameters.

In the immediate postoperative period, patients allocated to the optimized Main Cohort experienced a markedly accelerated recovery trajectory. The average length of hospital stay for this group was reduced to three days, in stark contrast to the five days averaged by the Control Cohort. Furthermore, the rigorous application of enhanced recovery protocols led to a substantial decrease in early perioperative morbidity. The incidence of minor early complications was reduced by over fifty percent in the Main Group. Early ambulation and optimized fluid management effectively minimized pulmonary complications and promoted a rapid return of gastrointestinal function.

The evaluation of long-term outcomes revealed the most crucial differences between the two therapeutic approaches. Patients receiving continuous psychological and nutritional support achieved and maintained a significantly higher percentage of excess weight loss. At the critical twenty-four-month follow-up mark, the optimized group successfully maintained an average excess weight loss of seventy-five percent. Conversely, the Control Group demonstrated a



noticeable trend of weight regain during the second year, averaging only a sixty percent excess weight loss.

The remission rates of severe obesity-related comorbidities paralleled the weight loss results. Patients in the comprehensive multidisciplinary pathway exhibited substantially higher rates of complete remission for type two diabetes and hypertension. Subjective quality of life assessments administered at the final follow-up indicated that patients in the Main Group reported significantly lower levels of depression and social isolation, highlighting the protective effect of the structured postoperative psychological interventions.

DISCUSSION

The findings of the research conducted at Andijan State Medical Institute strongly underscore the multifaceted nature of morbid obesity and the absolute necessity of moving beyond purely anatomical surgical solutions. The immediate physical benefits of enhanced recovery protocols are clearly evident in the accelerated hospital discharge and reduced early morbidity rates. However, the most critical insight provided by this study pertains to the long-term outcomes, which are heavily dependent on thoroughly addressing the deep psychological and social drivers of compulsive overeating.

Morbid obesity frequently stems from early life psychosocial trauma, chronic environmental stress, and social maladaptation. The psychological architecture of an individual is highly vulnerable to external societal pressures. Recent sociological research by Mirzayeva [9] highlights how negative attitudes from peers and society exert a profound destructive impact on the mental and physical health of individuals starting from childhood. These negative social interactions often lead to the development of compensatory eating disorders and severe body image distortion, which persist and magnify into adulthood. Addressing this underlying trauma through the cognitive-behavioral therapy integrated into our optimized protocol proved to be a decisive factor in preventing postoperative weight relapse.

Similarly, broader environmental changes and migratory stressors can severely disrupt living conditions and adaptation processes, creating a pervasive environment of chronic stress. As explored in the demographic analysis by Mamadaliyevna [8], the challenges of adapting to new environments and the impact of varied ecological factors create significant burdens on vulnerable populations, promoting metabolic dysfunction and maladaptive coping mechanisms such as hyperphagia. By integrating dedicated psychological support to help patients navigate these deep-seated social and emotional challenges, our clinical protocol empowered patients to adapt healthily to their new physiological state.

The significant divergence in excess weight loss at the two-year mark between the cohorts validates the concept that surgery alters the anatomy, but sustained success requires altering the behavior. Providing patients with the psychological tools to manage stress without resorting to food ensures that the profound metabolic benefits of the bariatric procedure are protected and maintained for the rest of their lives.

CONCLUSION

The comprehensive clinical study conducted at Andijan State Medical Institute definitively demonstrates that the surgical treatment of morbid obesity must be conceptualized and executed as a lifelong multidisciplinary intervention.

The integration of minimally invasive surgical techniques with modern enhanced recovery protocols significantly improves immediate perioperative safety and drastically reduces the



hospitalization burden. However, the immediate surgical success is merely the first step in a complex therapeutic journey.

Crucially, the mandatory integration of continuous psychosocial support, targeted cognitive-behavioral therapy, and nutritional counseling is absolutely essential for preventing long-term weight relapse and ensuring sustainable metabolic success. Without addressing the foundational psychosocial trauma and environmental stressors that contribute to the disease, surgical outcomes inevitably deteriorate over time.

Healthcare systems and surgical centers must therefore prioritize the establishment of dedicated, comprehensive bariatric teams. These teams must be equipped to address both the intricate physiological alterations and the complex psychological needs of the patient, thereby maximizing the transformative and life-saving potential of modern metabolic surgery.

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