

## OPTIMIZATION OF SURGICAL TREATMENT TACTICS ACUTE GANGRENO-NECROTIC PARAPROCTITIS

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**Abstract:** The article presents the results of treatment of 242 patients who underwent surgery in the multidisciplinary clinic of Samarkand State Medical University in 2015-2022, among them 23 (9.5%) patients were infected with the necrotic form of the disease. Acute paraproctitis of aerobic etiology was observed in 219 (90.5%) patients. The average age of the patients was  $63.1 \pm 4.9$ . All patients underwent clinical examination, rectal examination, rectomanoscopy, transabdominal and transrectal ultrasound examination, computed tomography, and bacteriological examination of wound secretions. All patients underwent urgent surgical operations. The results of the examination showed that timely radical surgery, antibacterial and detoxification therapy led to the recovery of the patients.

**Keywords:** acute paraproctitis, necrotic paraproctitis, abscess, purulent cavity drainage, sepsis, polyorgan failure.

## ОПТИМИЗАЦИЯ ТАКТИКИ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ОСТРОГО ГАНГРЕНОЗНО-НЕКРОТИЧЕСКОГО ПАРАПРОКТИТА

**Аннотация:** В статье представлены результаты лечения 242 больных, перенесших операцию в многопрофильной клинике Самаркандского государственного медицинского университета в 2015-2022 годах, из них 23 (9,5%) больных были инфицированы некротической формой заболевания. Острый паропроктит аэробной этиологии наблюдался у 219 (90,5%) больных. Средний возраст пациентов составил  $63,1 \pm 4,9$  лет. Всем больным проведено клиническое обследование, ректальное исследование, ректоманоскопия, трансабдоминальное и трансректальное ультразвуковое исследование, компьютерная томография, бактериологическое исследование раневых выделений. Всем пациентам были выполнены срочные хирургические операции. Результаты обследования показали, что своевременно проведенное радикальное хирургическое вмешательство, антибактериальная и дезинтоксикационная терапия привели к выздоровлению больных.

**Ключевые слова:** острый паропроктит, некротический паропроктит, абсцесс, дренирование гнойной полости, сепсис, полиорганная недостаточность.

### INTRODUCTION

Acute paraproctitis is the most common pathology in the practice of emergency surgical proctology [1, 2, 7], while gangrenous-necrotic forms of the disease occur in only 7–10% of cases; in the analysis of the literature, most authors do not include necrotic paraproctitis (NP) in the scope of their studies, highlighting the extreme difficulty of its diagnosis and treatment.

The development of treatment issues for necrotic paraproctitis is determined by the fact that this disease is a life-threatening disease, the mortality rate ranges from 15 to 40%, and with generalization of the process up to 80% [3, 4, 5, 6]. The above is due to the fact that the etiological factor of NP is a combination of opportunistic autoflora, in which anaerobes with high invasiveness and toxicity become the leader-associate [1, 3, 5], which determines the rapid generalization of the process and causes difficulties in diagnosis and the complexity of complex postoperative treatment septic conditions.

Currently, streptococci, staphylococci, fusobacteria, spirochetes and other associations of anaerobic and aerobic bacteria are considered as pathogens [5]. Septicemia observed in NP is usually caused by streptococci [3, 5]. According to modern literature, the anaerobic nature of the process is due to the high dose and virulence of the infectious agent against the background of a decrease in the immunological resistance of the body [1, 2, 4, 5]. Indeed, NP often occurs due to poor hygiene in combination with diabetes mellitus. The literature also indicates other factors that influence systemic immunity and predispose to the development of anaerobic inflammation of the perirectal tissue: autoimmune diseases and the use of steroid hormones, antitumor chemotherapy, neurosensory diseases, periarteritis nodosa, etc. [3, 7].

Despite the improvement of surgical techniques, the development of progressive methods of detoxification and antibacterial therapy, the treatment of acute necrotizing paraproctitis still remains a complex and, in many ways, poorly resolved problem of modern surgery and coloproctology, which determines the need for further developments in this area.

#### **PURPOSE OF THE STUDY**

To develop and improve treatment tactics for acute gangrenous-necrotic paraproctitis.

#### **MATERIAL AND RESEARCH METHODS**

For the period 2015–2022. In the proctology department of the Multidisciplinary Clinic of SamSMU, 242 patients with various types of acute paraproctitis were operated on, among which patients with necrotic forms of the disease accounted for 23 (9.5%) patients. Among them, 219 (90.4%) had an aerobic etiology of damage to the peri-rectal tissue. The average age of the patients was  $63.1 \pm 4.9$  years. There were no statistically significant differences in the ages of men and women.

All patients underwent a clinical examination, digital examination of the rectum and sigmoidoscopy, transabdominal and transrectal ultrasound examination, computed tomography and bacteriological examination of wound discharge.

Results and its discussion.

Surgical interventions in all cases were performed according to urgent indications. The operation was delayed by 1–4 hours only in cases where preoperative preparation of extremely critically ill patients was necessary. The necrotic perineal abscess was opened only under general anesthesia. The intervention was carried out through a wide incision across the entire identified area of inflammatory changes, according to the type of surgical approach. This made it possible to conduct a thorough intraoperative inspection with assessment of the volume of soft tissue damage, demarcation of the boundaries between visible altered and healthy tissues, and detection of possible pockets and leaks. Since the main task at this moment was to save the patient's life. The criteria for the viability of the resulting wound surface were clear capillary bleeding of tissue. The operation was completed by jet irrigation of the wound with antiseptic solutions and application of a bandage with decasan solution. In two cases, due to necrotic changes in the rectal wall, a sigmoidostoma was performed. In all other observations, fecal flow was not switched off. In no case of necrotic paraproctitis did we eliminate the purulent tract simultaneously during the main radical operation.

Antibiotic therapy was started 30–40 minutes before surgery. Intensive detoxification, infusion, and symptomatic therapy were also carried out, and tube feeding with balanced enteral mixtures was provided. After the operation, inspection of wound surfaces and dressings were performed several times a day, on average 2–3 times. In 82% of patients, newly emerging foci of necrosis were discovered in the first few days of the postoperative period, which were removed

sharply during dressings. It is very important in the surgical treatment of acute gangrenous-necrotic paraproctitis to determine the extent of irreversible pathological changes. This is necessary to perform necrectomy of the optimal volume, which significantly affects the outcome of treatment. In our study, we relied on the laser Doppler flowmetry method, considering the characteristics of tissue microcirculation to be an important indicator of the extent of the inflammatory process. Death occurred in 2 (5.5%) patients with acute necrotizing paraproctitis.

Long-term results were monitored in 19 (82.6%) patients through examination and questionnaires. The majority of them (86.2%) did not make any complaints requiring any participation. However, in 4 (17.4%) patients, extrasphincteric fistulas of the rectum formed, which, 6 months after the main interventions, were successfully eliminated using various surgical methods.

### CONCLUSION

Acute necrotizing paraproctitis is a serious, life-threatening disease and is accompanied by high mortality. The success of treatment largely depends on early diagnosis of the inflammatory process, emergency operations as early as possible with sufficient necrectomy and adequate intensive care.

Most often, unsatisfactory treatment results are due to late referral of patients for specialized medical care (71.7% of cases), as well as late diagnosis of the disease in non-specialized institutions. This leads to widespread damage to the pelvic tissue spaces and sphincter muscle fibers, which makes radical intervention difficult.

The research results indicated that timely and radical surgery, supplemented with antibacterial and detoxification therapy, led to recovery.

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