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CHOOSING SURGICAL METHODS IN THE TREATMENT OF HEMORRHOID DISEASE IN PATIENTS: MODERN APPROACHES, PATHOGENETIC BASIS AND LITERATURE ANALYSIS

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Introduction and global epidemiological relevance of the problem

Hemorrhoids (hemorrhoids) are the most common disease in coloproctology and general surgery, characterized by pathological dilatation, inflammation, bleeding and formation of nodules of the venous vessels (hemorrhoidal plexuses) of the anal canal and distal part of the rectum. This disease is of extremely high epidemiological importance on a global scale and has a serious negative impact on the quality of life of tens of millions of people around the world, their daily and professional work activities, as well as their psycho-emotional state. One of the most pressing issues facing modern medicine is not only the elimination of symptoms of the disease, but also the development of optimal treatment strategies that improve long-term outcomes, prevent complications and ensure cost-effectiveness.

Epidemiological observations and multicenter analyses have shown that the prevalence of the disease varies significantly depending on geographical regions, lifestyle, dietary habits, and the level of development of medical diagnostic methods. Evidence-based studies show that the prevalence of hemorrhoids in the US population is on average 4.4%, and more than 10 million patients actively suffer from this disease.[1]However, in European countries such as the United Kingdom and some developing countries, this figure has been confirmed to range from about 13% to 36%.[1]Some specific population studies have reported high incidence rates of 38.93% in Australia, 16% in Israel, 14.4% in South Korea, and even up to 70% in China.[1]The severity of the epidemiological situation is demonstrated by the fact that in developing countries, particularly on the African continent (for example, according to data from the Gondar University Clinic in Ethiopia), the prevalence of the disease among adults is 13.1%, and among men it is up to 18.8%.[1]

Although the disease is most common in people between the ages of 45 and 65, rates are steadily increasing among young people due to urbanization, technological advancement, sedentary lifestyles, and increased consumption of refined, low-fiber foods.[7]As for gender differences, most modern meta-analyses emphasize that the disease is almost equally prevalent in both sexes, but pregnancy and childbirth in women, and heavy physical labor or weightlifting in men, play a leading role in provoking the disease.[5]

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From a socio-economic point of view, hemorrhoids cause serious problems such as disability, lost working days, and increased economic costs. In many cases, patients are embarrassed to seek medical attention (stigmatization), which leads to the delay in diagnosis and the development of severe complications (thrombosis, chronic anemia due to bleeding).[8]

In recent years, the Republic of Uzbekistan has been carrying out significant work to bring the healthcare system into line with international standards, widely introduce high-tech and minimally invasive surgical methods, and introduce the principles of evidence-based medicine into practice. In particular, the national clinical protocols and medical standards developed and implemented by the Ministry of Health of the Republic of Uzbekistan (MoH) serve to optimize the early diagnosis of diseases, including hemorrhoids, step-by-step treatment, and post-surgical rehabilitation processes.[9]According to national indicators, the incidence of gastrointestinal pathologies, including chronic constipation and hemorrhoids, remains high in Uzbekistan due to unhealthy eating habits and the peculiarities of the traditional diet.[12]In this regard, local coloproctologists are conducting continuous research to improve objective criteria for choosing a surgical method for treating hemorrhoids in patients, deeply integrating the experience of international practice guidelines (for example, ASCRS, ESCP) into national practice.

Etiopathogenesis, Risk Factors, and Physiological Mechanisms

A thorough understanding of the pathogenesis of hemorrhoids is a fundamental basis for the correct choice of conservative and surgical treatments. In the anatomy of the anorectal area, there are special structures called "anal vascular cushions", which are mainly located in the right anterior, right posterior and left lateral areas (at positions 3, 7 and 11 on the clock face). These cushions consist of a network of blood vessels (arteriovenous anastomoses), smooth muscle fibers (Treitz muscle) and connective tissue (collagen and elastin fibers), which in normal physiological conditions ensure complete closure of the anal canal and act as an important sensor and hermetic cushion for retaining gases and fluids.[13]

According to modern concepts, hemorrhoids are not simply "varicose veins", but a complex of dystrophic, degenerative and hemodynamic changes in these anal cushions. Two leading theories of pathogenesis are recognized:

1. **Mechanical theory (Sliding Anal Lining Theory):**According to this theory, with age, chronic stress, and inflammation, the muscles of Treitz and the connective tissue apparatus that attach the pads to the anal sphincter degenerate and lose their elasticity. As a result, the vascular pads slide downwards into the distal part of the anal canal (prolapse).[2]
2. **Hemodynamic (Vascular) theory:**This theory explains the abnormal filling of the cushions with blood (engorgement) due to dysregulation of vascular tone, accelerated blood flow at arteriovenous anastomoses, and impaired venous outflow (drainage). Also, endothelial dysfunction and activation of matrix metalloproteinases lead to weakening and hyperplasia of the vessel walls.[2]

Many exogenous and endogenous risk factors that trigger this pathogenetic chain are highlighted:

- **Chronic constipation and straining:**Persistently high intra-abdominal pressure during defecation causes engorgement of the pelvic veins. A large study based on colonoscopic screening showed that chronic constipation is one of the strongest factors in the development of hemorrhoids, increasing the risk by 1.43 times (OR=1.43).[6]When a hard mass of stool passes, it directly traumatizes the lining of the intestines and causes bleeding.
- **Body Mass Index (BMI) and Obesity:**Excess weight not only increases intra-abdominal pressure, but also triggers systemic inflammatory responses (cytokine release).

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According to studies conducted in Ethiopia and other countries, the risk of developing the disease is up to 25.5% higher in overweight patients.[5]

- **Pregnancy and childbirth:**During pregnancy, the mechanical pressure exerted by the enlarged uterus on the iliac and caval veins, as well as hormonal changes in the circulatory system (in particular, the relaxing effect of the hormone progesterone on the vascular walls), leads to temporary or permanent enlargement of hemorrhoids in women. According to statistics, hemorrhoidal pathology is noted in 39.1% of women with a history of childbirth, which is significantly different from that in nulligravida (never giving birth) women.[5]
- **Lifestyle and occupational factors:**Prolonged sitting (drivers, office workers), low physical activity, prolonged static stress (for example, in weightlifters this figure reaches up to 20%) increase venous stasis in the pelvic organs.[1]
- **Genetic predisposition:**Congenital defects in the collagen and elastin content of the vascular wall are another important factor determining the hereditary nature of hemorrhoids.

As the pathological process progresses, the nodes enlarge, their upper mucosa thins (become prone to bleeding) and protrudes. The disease often begins latently or with minimal symptoms, and then becomes chronic, leading to severe clinical complications such as bleeding, itching, node prolapse, acute inflammation and thrombosis.

Evolution of clinical diagnostic criteria and classification systems

Deciding whether patients need surgical treatment for hemorrhoids and which method to choose directly depends on an objective and thorough diagnosis and accurate determination of the stage of the disease.

DIAGNOSTIC ALGORITHMS

The standard proctological examination algorithm consists of a careful collection of patient complaints (nature of bleeding, pain, prolapsed nodes, defecation characteristics) and a series of physical and instrumental examinations:

1. **External visual examination and palpation:**Examination of the anal area at rest and during exertion (Valsalva maneuver) allows the detection of external hemorrhoidal nodes, skin tags, fissures, and fistulas.[15]
2. **Digital rectal examination (DRE):**This is a mandatory method that is extremely necessary not only to assess large internal nodes, but also to assess anal sphincter tone (the presence of spasm or insufficiency) and to rule out other pathologies in the lower rectum, in particular tumors.[15]
3. **Anoscopy and Rectoscopy:**The main tool for direct visualization of the location, size, mucosal inflammation, and source of bleeding of internal hemorrhoids is a diagnostic tool.[16]
4. **Colonoscopy:**According to the American Society of Colon and Rectal Surgeons (ASCRS) clinical guidelines, a complete colonoscopy is recommended in all suspected cases with bleeding symptoms to exclude colon cancer (colorectal cancer). Although most cases of bleeding are associated with hemorrhoids, misdiagnosing symptoms with cancer is one of the most dangerous diagnostic errors in practice. Therefore, colonoscopy should be performed in patients who are elderly, have unexplained weight loss, are anemic, or have persistent bleeding despite treatment.[16]
5. **Additional checks:**Endorectal ultrasound (endo-US) and magnetic resonance imaging (MRI) are used to detect fistulas, hidden purulent processes, or sphincter defects, especially in preparation for repeat surgery.

Classification Systems: From Goligher to BPRST

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To determine the surgical strategy, it is necessary to classify the disease into stages. For decades, the Goligher classification has been widely used throughout the world. This classification is based solely on the nature of the prolapse of internal hemorrhoidal nodes:

- **Level I:**The nodes only bleed, there is no prolapse.
- **Level II:**During defecation, the nodes come out and go back in on their own.
- **Level III:**Prolapsed nodes can only be inserted manually.
- **Level IV:**The nodes are permanently out and cannot be put back in place.

However, in modern surgery, this classification is widely criticized for its serious limitations. Its biggest drawback is that Goligher only takes into account internal hemorrhoids; important factors such as external hemorrhoidal thrombosis, giant skin tags, and pain intensity in the patient are not assessed. For example, a patient may have grade 1 internal hemorrhoids and at the same time a large, severely painful external thrombosis. According to Goligher's classification, he is considered grade I and can only be recommended conservative medication, while the patient's condition requires urgent surgical intervention (thrombectomy or excision surgery).[17]

In order to eliminate these inconsistencies and create a comprehensive and definitive surgical tactics algorithm, Brazilian scientists (Sobrado Júnior and co-authors) created the BPRST (Bleeding, Prolapse, Reduction, Skin tags, Thrombosis) classification system, which covers all components of the disease and is similar to the oncological TNM system.[19]This revolutionary classification divides symptoms and physical findings into five distinct parameters:

Table 1

BPRST Component	Clinical condition and description	Level code
B(Bleeding)	No bleeding	B0
	There is bleeding.	B1
P(Prolapse - Prolapse)	No prolapse at all	P0
	Only 1 node will prolapse	P1
	2 or more nodes prolapse	P2
R(Reduction)	The nodes regress spontaneously.	R0
	The nodes are returned manually.	R1
	Prolapse does not return (irreducible condition)	R2
S(Skin tags)	No external skin folds	S0
	Symptomatic (painful, inflamed, interfering) skin folds are present	S1
T(Thrombosis)	No acute thrombosis	T0
	There is acute thrombosis that is resistant to conservative treatment.	T1

The combination of these parts clearly determines the patient's final clinical stage (Stage) and the corresponding type of treatment:

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- **Stage I:**B1 + P0 + R0 + S0 + T0. The patient has only bleeding. Treatment: lifestyle changes, a high-fiber diet, and outpatient (office) procedures (RBL, sclerotherapy, IRC).[18]
- **Stage II:**Any B + (P1, P2 or R1) + T0. The patient has prolapse but no external thrombosis. Treatment: In addition to stage I measures, anoderm-preserving surgical types (Stapled hemorrhoidopexy, HAL-RAR, Laser).[18]
- **Stage III:**Any B + Any P + (R2, S1 or T1). The patient has a stricture prolapse, large skin folds or acute thrombosis that significantly reduces the quality of life. For such patients, radical excision surgery with removal of the anoderm (Milligan-Morgan, Ferguson methods) becomes the first choice.[18]

Retrospective analyses (149 patients) have shown that the BPRST classification significantly reduces surgical errors and tactical discrepancies compared to Goligher.[19]

Conservative and minimally invasive (outpatient) treatment methods

Since surgical intervention has its own risks and complications, international guidelines recommend conservative and minimally invasive outpatient methods as the initial treatment in all cases.

Lifestyle changes, diet, and pharmacology

First, it is important to control chronic constipation. Patients are advised to eat at least 25-35 grams of fiber-rich foods (fruits, vegetables, cereals) per day and drink enough water (2-3 liters).[16]Fiber softens the stool mass and increases its volume, which prevents straining and straining during the act of defecation, as well as venous stasis.

The most widely used agents in pharmacotherapy are phlebotonics and angioprotectors (e.g., micronized purified flavonoid fraction - MPFF, sulodexide). They inhibit leukocyte adhesion to the endothelium, block the synthesis of inflammatory mediators (e.g., prostaglandin E2), and reduce the permeability of capillary walls. Clinical studies have shown that the appointment of phlebotonics not only relieves acute symptoms, but also reduces bleeding and pain in the postoperative period, reducing the risk of recurrence by almost 20%. Also, local approaches - ointments and suppositories containing analgesic and anti-inflammatory components such as corticosteroids, lidocaine, pramoxine - are an integral part of outpatient therapy.[16]

Outpatient (office-based) interventions

If drug therapy fails or the patient has grade I-II hemorrhoids with persistent bleeding, outpatient methods are used:

1. **Rubber Band Ligation (RBL):**The most commonly used, inexpensive and cost-effective method in outpatient proctology. The mechanism of its operation is that the internal hemorrhoidal node is grasped with the help of an instrument and a special elastic latex ring is inserted into its base. This ring cuts off the blood flow and ischemic necrosis begins in the node tissue. After about 5-10 days, the node dries up and falls out with the stool, and the scar formed in its place fixes the mucous membrane to the lower layers and prevents prolapse.[16]Recent modifications use "negative pressure" equipment with a vacuum aspirator, which has dramatically reduced the risk of complications and pain.[17]The use of innovative devices such as non-reactive polymer clips (BANANA-clips) instead of traditional rings is currently in the focus of research, reducing bleeding complications to almost zero.[17]
2. **Sclerotherapy (Sclerotherapy):**Injection of a special chemical sclerosant (such as polidocanol or ALTA - aluminum potassium sulfate and tannic acid) into the vascular network that feeds the node. This substance destroys the endothelial cells in the vessel wall, causes aseptic inflammation, and serves to obliterate (close by scarring) the vessel and solidify

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the cushion to the muscle surface.[16]In recent years, the practice of administering the sclerosant in the form of a "foam" mixed with oxygen, rather than in liquid form, has become popular. The foam remains in contact with the blood vessel walls for a longer period of time, which slows its absorption and dramatically increases its effectiveness.[17]

3. **Infrared Coagulation (IRC):**Infrared waves delivered by a special device are converted into heat energy, causing denaturation and coagulation of blood vessel proteins. It is mainly used for small bleeding grade I nodes, and although the recurrence rate is slightly higher than RBL, it is preferable because it is painless.[16]

Modern and radical surgical methods: operative tactics and comparison

The above-mentioned outpatient procedures are not effective in stage III BPRST, in large descending nodes, and in complicated (thrombotic) forms. For such patients, urgent or elective surgery becomes necessary.[13]According to a large-scale meta-analysis (including 7 studies involving 760 patients), surgical treatment increases the chance of complete cure of the disease by almost three times compared to conservative treatment (OR = 2.96, 95% CI: 1.66–5.28, $p < 0.001$).[28]Although the pain is more intense in the first four days after surgery, in the long term (after 10 days) it will subside completely and the quality of life will improve to a high level.[28]

Currently, the following operative methods are widely analyzed and used in clinical practice:

1. Classic Excisional Hemorrhoidectomy

A historically tested "gold standard" intervention. There are two main variants: the open-wound Milligan-Morgan method and the Ferguson method, which closes the wounds with sutures.[17]The surgeon separates the core (vascular legs) of the bleeding, prolapsed internal and external nodes, clamps, ties, and cuts them off together with the remaining excess tissue (anoderm).[13]

- **Advantages:**It simultaneously eliminates the external and internal components (ideal in cases of S1, T1 of BPRST), the probability of disease recurrence is the lowest among all methods (1-2%).
- **Disadvantages:**The incision of the anoderm (anal skin), which is very densely packed with sensory nerve fibers, causes unbearable pain after the operation. It takes 4-6 weeks for the wound to heal completely. The quality of complications is assessed by such phenomena as acute bleeding (in about 2% of cases) and postoperative urinary incontinence (in 15% of patients).[16]Also, accidental damage to the sphincter can cause incontinence.[28]

2. Stapled Hemorrhoidopexy (SH, Longo method)

A revolutionary method introduced by Antonio Longo in 1998. It is based not on cutting the nodes themselves, but on a circular cut of the blood vessels feeding them from the rectal mucosa (2-4 cm above the dentate line). A special circular stapler device cuts the mucosa and the mucosal layer in a cylindrical shape, simultaneously suturing the tissues with titanium clips (staples).[13]As a result, the nodes with a cut-off blood supply dry out, and most importantly, the tissue that has been hanging down (prolapsed) is mechanically pulled up to its normal position (lifting).

- **Advantages:**Because the anoderm is not damaged, the pain is significantly less than with excisional hemorrhoidectomy, and the return to work period is shorter.[13]
- **Problems and Modern Modifications:**Serious risks, such as scarring stenosis of the rectal wall after circular resection and the development of rectovaginal fistulas in women, have been widely discussed in the reviews.[17]For safety reasons, surgeons are now moving away from "full circular" resections and toward TST (Tissue Selecting Technique) or Large C Suture

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techniques, which cut only a small area of diseased tissue. They preserve the capacity of the rectum and prevent scarring.[17]

3. Hemorrhoidal Artery Ligation and Mucopexy (HAL-RAR)

This method is a technology that uses sound waves to locate the terminal hemorrhoidal arteries (all branches) using a special anoscope equipped with a Doppler ultrasound probe and indirectly ligate them with figure-of-eight sutures.[25]Once the bleeding stops, the nodes will disappear. If the patient has a prolapse, it will be additionally repaired with a mucopexy (RAR - Recto Anal Repair) procedure, which means that the mucosa is collected with a continuous suture and sewn inside.[17]

- **Modern trend:**Meta-analyses prove that there is no significant difference in treatment effectiveness between ligation performed by a surgeon without a Doppler device (Blind HAL) based on his anatomical experience and the expensive Doppler-guided procedure (success rates average around 85% in both).[17]Since it cannot lose external components, it is mainly recommended for stages I and II according to the BPRST system.[18]Also, as an alternative, the X-ray vascular embolization method, which closes the vessels through angiography, is gaining attention, especially in elderly patients who cannot undergo surgery.[17]

4. Laser Hemorrhoidoplasty (LHP) and Radiofrequency Ablation (Rafaelo)

One of the latest advances in medicine is the direction of affecting tissues with thermal energy. In the LHP procedure, a thin laser fiber is inserted into the internal nodal tissue and directs light (with a wavelength of 1470 nm or 980 nm) into the blood vessels and cavities.[13]This process reduces the size of the nodule by more than 90% through coagulation and vaporization. Clinical comparisons have shown that the 1470 nm wavelength laser minimizes thermal damage to the surrounding muscles due to its greater absorption by water (tissue fluid) (980 nm is mainly absorbed by hemoglobin).[17]The similar "Rafaelo" procedure obliterates the nodule by heating it with radiofrequency waves.[26]These are considered optimal options that are bloodless, minimally painful, and have a complication rate of up to 5%.

Table 2

Surgical Method	Basic Instruction (Goligher / BPRST)	Implementation mechanism	Expected complications and disadvantages
Excision Hemorrhoidectomy(Milligan-Morgan, Ferguson)	Goligher III-IV, BPRST Stage III (with S1, T1)	Complete resection of the outer and inner anoderm/mucosa and the nodal core.	Postoperatively, severe pain, prolonged bleeding, urinary retention up to 15%, anal stenosis.[16]
Stapled Hemorrhoidopexy(Longo, TST, Large C Suture)	Goligher II-III, BPRST Stage II (circular prolapse only)	Fixation by circular or partial incision of the mucosa and submucosa above the dentate line.	Rectovaginal fistulas (rare), risk of stenosis, tenesmus, higher long-term recurrence rate.[17]
SOLUTION(With and without Doppler)	Goligher II-III,	Ligation of hemorrhoidal arteries	It does not help with external hemorrhoids

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	BPRST Stage II	with special sutures, fixation of the prolapse to the mucosa (mucopexy).	(skin tags), as complete resolution of the node takes a long time.[18]
LHP / Radio Frequency(Laser, Raphael)	Goligher II-III, BPRST Stage II-III	Coagulation (vaporization) and reduction of the size of the nodule from the inside using laser energy.	Risk of thermal burns (depending on the laser device used), expensive equipment and skill required, partial recurrence.[17]

Post-surgical complications and their management: the experience of Uzbekistan (Samarkand)

One of the most serious diseases that can occur after radical procedures such as hemorrhoidectomy due to carelessness or inaccurate surgical technique is Postoperative Stenosis of the Anal Canal (PSAC). When the anoderm and mucosa are cut off in large quantities, their place is replaced by coarse scar tissue. The patient is faced with a new disease, such as constant pain and painful defecation.

Excellent research has been conducted in Uzbekistan, and in particular at Samarkand State Medical University, to address this complex issue, which is also recognized in international practice.[14]Clinical scientists conducted a comprehensive analysis of the surgical outcomes of a total of 102 patients with postoperative anal canal stenosis (PSAC, grade II and III stenosis) (46 patients retrospectively and 56 patients in an improved prospective manner) between 2013 and 2024.[14]

Local doctors have implemented a differential surgical approach (algorithm) for each patient, depending on the degree of narrowing, its form (mucosal stenosis or complete scarring), and concomitant diseases (chronic fissure, fistula):

1. **Mucosal Narrowing:**In such cases, after removing the scar tissue, instead of performing a simple anoplasty, special flaps (skin fragments) were taken from the surrounding healthy anoderm or gluteal skin layer, moved into the cut space and sutured. Among these, the Diamond-flap and VY flap anoplasty techniques gained importance due to their high refinement and scar-free healing.[14]Sometimes, this procedure is combined with removal of the fissures and partial lateral incision of the internal sphincter (PLIS).[14]
2. **Conditions complicated by rectal fistulas:**If there are infected, purulent fistulas near the stenosis, direct plastic surgery will lead to suppuration of the wound. A two-stage radical solution has been proposed to combat this: in the first stage, the purulent spaces are punctured and cleaned (sanitation) under the control of special ultrasound navigation; in the second stage, stricturotomy and anoplasty are performed only after a complication-free zone is provided.[14]

The scale of achievements: These targeted surgeries, introduced by specialists in Samarkand, have achieved unprecedented reductions in complications:

- Postoperative complications occurring initially decreased from 19.5% to 12.5%.[14]
- Most importantly, the long-term recurrence of the disease (stricture recurrence) was reduced by almost half, from 13.1% to 7.1%.[14]
- The risk of sphincter nerve muscle damage (anal sphincter insufficiency) was also reduced from 10.8% to 5.3% when stenosis was corrected.[14]These factual figures are

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evidence that national clinical experience and science in Uzbekistan fully meet the standards of global proctology and make a significant contribution to the development of medical practice.[9]

Assessment of Patients' Psychological Status and Quality of Life

The basis of modern protocols is the principle of "treating the patient, not the disease." Although hemorrhoids are not life-threatening, it is no secret that patients are subject to painful social isolation and depression. A medical survey of 417 people in Saudi Arabia revealed that 64% of respondents had very limited understanding of the pathogenesis and prevention of hemorrhoids, and 50% of citizens considered their own traditions and "shame" factors to be the main obstacles to visiting a doctor.[8]Patients' prolonged use of alternative medicine or self-treatment via the Internet without visiting a doctor ultimately leads to the above-mentioned complications, depression, and family and sexual problems.

Quality of Life (QoL) serves as a numerical index that determines the need for surgery. In the medical literature, questionnaires such as the SF-36, as well as specialized questionnaires such as the HEMO-FISS-QoL and Hemorrhoidal Disease Symptom Score, are widely used to diagnose the condition of patients.[24]Analyses show that before treatment, the indices of constant anxiety due to physical fatigue, blood and contamination are high (for example, the average quality of life is 45 points). Within the first few months after the procedure - whether it is a properly selected conservative pharmacotherapy or a modern operation such as laser or PPH - the quality of life scores increase to 75-80 points, and patients quickly return to normal professional and social life.[24]

Comorbidity is also a concern. In developed and aging populations, comorbidities such as benign prostatic hyperplasia (BPH) and chronic venous insufficiency are common.[31]In the elderly and patients with cardiovascular problems, there is no direct indication for traditional excisional surgery (when admitted to the emergency hospital), in such situations it has been found that hospital mortality can reach up to 2% due to increased risks such as sepsis and coagulopathy. Therefore, the social status of each elderly patient is analyzed using a QoL test, and the safest methods (for example, embolization of the embolized vessel) are determined accordingly.[17]

International Clinical Protocols, National Standards Integration and Guidelines

In the age of evidence-based proctology, it is emphasized that random empirical treatment is absolutely unacceptable. The success of surgical intervention is explained by the perfection of the indications.

ASCRS (American Society of Colon and Rectal Surgeons) Guidelines (2024-2025 update): The American Association places great emphasis on diagnostic vigilance, strongly recommending that all adults with bleeding, as well as patients with a history of similar conditions, undergo a colonoscopy to rule out colorectal pathology.[15]Although they respect the advantages of minimalism in medicine, they clearly prefer excisional hemorrhoidectomy if the disease is at its final stage—massive internal-external combined hemorrhoids—knowing that other tools will fail.[16]

ESCP (European Society of ColoProctology) Guidelines (2024-2025): The European experience is based on different methodological quality rules. When the ESCP reviewed all local country protocols through the AGREE II mechanism, most were found to be of poor quality.[33]Their main tragedy was that they were authoritarian. The European protocol introduced the lofty concept of Shared Decision-Making.[25]The patient has the right to full information. That is, the surgeon must explain: "If I cut you with the Milligan-Morgan method, you will feel very bad pain tomorrow, there will be complications, but this disease will not bother you for the rest of your life. If I sew you up with a stapler or insert a needle through a

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doppler, you will go to work in the evening, but after 5 years you may come back to me with a 10-15% probability."[27]The treatment method is determined not only by the Goligher or BPRST score on paper, but also by the person's social activities and the medications they are taking (antiplatelet agents).

The same international principles are being rapidly adopted in Uzbekistan. Based on the new protocols being implemented through the web portal of the State Social Security Administration of the Republic of Uzbekistan www.ssv.uz, district and regional polyclinics and inpatient facilities provide services in strict compliance with these evidence-based documents.[9]The surgical tactics that every citizen facing, whether receiving free or paid treatment, is not based on the personal wishes of a specialist, but is scientifically based within the framework of a specific algorithm and classification (such as BPRST).

Conclusion

Literature review, research analysis, and comparative statistics prove that the choice of surgical tactics for the treatment of hemorrhoids in patients is a complex and multifaceted problem. According to its epidemic significance, this disease, which affects all strata of society, including young people, is an urgent social threat, with a prevalence of 36% to 70% in some populations.[1]

The most important conclusion in the treatment algorithm is that it is necessary to consistently implement broad-format systems such as BPRST (Bleeding, Prolapse, Reduction, Skin tags, Thrombosis) into the clinic, rather than old and anatomically flawed classifications such as Goligher.[18]This approach has allowed for extremely precise differentiation of surgical indications in practice.

Most patients, unfortunately, ignore the disease in its early stages, at I-II. At this time, completely outpatient bloodless treatment was possible with foam sclerotherapy, vacuum ring ligation (RBL) or BANANA clips. When the disease is late, the surgeon has to rely on the technical arsenal. For severe, complicated patients with III-IV stages, classical excision procedures are preserved, in which the anoderm is radically excised, but the possibility of recurrence is eliminated. However, given the fact that the patient suffers from poor quality of life and long rehabilitation, medicine is now increasingly relying on infrared, ultrasound Doppler (HAL-RAR) techniques, especially high-frequency radio waves (Rafaelo) and LHP (1470 nm) lasers of various nanometers. National scientific achievements in Samarkand have reduced the incidence of complications of anal stenosis from 19.5% to 12.5%[14]This indicates that the qualifications and capabilities of Uzbek proctologists are developing within the framework of international community standards.

The future direction is to actively listen to the patient (shared-decision making) and rely on evidence and national standards, under the principle that one instrument does not work for all. Only in this way can the medical, economic, and social burden of the disease be alleviated.

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