



A NEW APPROACH TO SURGICAL TREATMENT OF CRYPTOGLAND FISTULAS OF THE RECTUM

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Abstract:

Rectal fistulas represent 0.8-1.2% of surgical conditions and exhibit various morphological forms, including branched or horseshoe-shaped passages, often forming after spontaneous abscess openings. Cryptoglandular rectal fistula involves chronic inflammation in the crypt, intersphincteric space, and pararectal tissue, resulting in fistula formation. The affected crypt acts as the internal fistula opening, with the external opening typically on the perineal skin, and less frequently on the buttocks, scrotum, or vagina. The prevalence ranges from 8 to 23 cases per 100,000 people, primarily affecting those aged 30 to 50, highlighting its social impact. Men are more commonly affected than women. Chronic paraproctitis usually follows acute paraproctitis and abscess drainage without infection control. Diagnosis involves rectal digital examination, button probe revision, sigmoidoscopy, dye tests, ultrasound with a rectal probe, and fistulography. Complex cases may require MRI and examination of rectal obturator function. Numerous surgical treatments exist for rectal fistulas.

Keywords: Rectal fistulas, flesh, coloproctology, paraproctitis

INTRODUCTION. Rectal fistula is a common disease, occurring, according to various data, in 2-3 people per 100,000 population, with a predominance of men over women (2:1). In the United States of America, between 200 and 250 thousand surgical interventions for the disease are performed annually. The treatment of anal fistulas was first mentioned in the manuscripts of Greek physicians in 400 BC. Despite such a long history of the disease and the variety of methods of surgical correction, coloproctologists do not stop in search of the optimal method of treatment due to the high percentage of fistula recurrences. In ancient times, one of the main options for the treatment of the disease was a ligature method using a thread "seton" (Latin seta, English "bristle"). Hippocrates suggested treating fistulous passage by inserting a horsehair-wrapped linen thread into the fistulous passage and gradually tightening it until the "flesh" is completely erupted. For many centuries, surgeons have been interested in this type of correction with its multiple modifications. The essence of the ligature method was to guide the thread through the external and out of the internal fistula with its daily tightening to maintain constant pressure on the underlying tissues, which leads to necrosis and dissection of anal sphincter fibers with replacement of the previously dissected muscle with a fibrous linear scar. One of the variants of ligature used in Indian

Ayurvedic medicine (kshara-sutra) is silk thread impregnated with extract of *Achyranthes aspera* plant. The chemical composition has pronounced alkaline properties, and under the action of the extract there is a slow crossing of tissues. This type of ligature is still used in India, but its use is not widespread in Europe and America. This is due to the pronounced pain syndrome caused by chemical action on the tissue, compared to the traditional treatment option (excision of the fistula), as confirmed in a randomized study K. S. Ho et al.

PURPOSE OF THE STUDY To conduct a retrospective analysis of local conditions, surgical treatment methods, and immediate postoperative outcomes in patients with chronic cryptoglandular paraproctitis based on fistula location and complexity.

MATERIALS AND METHODS: The study analyzed examination and treatment results of patients with cryptoglandular fistulas at the coloproctology department of the 1st clinic of Samarkand State Medical University from 2020 to 2024. Excluded were patients with post-traumatic fistulas, Crohn's disease fistulas, radiation epitheliitis, and tumor-related fistulas. In total, 365 patients were treated, with 244 (66.8%) men and 121 (33.2%) women. Age distribution was: under 30



years – 58 (15.8%), 31-50 years – 154 (42.2%), and over 51 years – 153 (42%).

RESULTS OF THE STUDY. The internal and external fistula openings corresponded in 423 (89.05%) cases. External openings were located on the anterior wall (142, 28.03%), lateral wall (123, 24.3%), and posterior wall (142, 47.7%). Internal openings were found in anterior crypts (155, 32.7%), lateral crypts (29, 6.2%), and posterior crypts (291, 61.3%). Incomplete fistulas were seen in 53 patients (11.2%). Fistulas were located extrasphincterically in 89 (18.7%) cases, transsphincterically in 292 (61.5%), and intrasphincterically in 94 (19.7%). Seven cases (1.47%) involved rectovaginal fistulas. Complicated chronic paraproctitis occurred in 70 (14.7%) patients, presenting with multiple secondary fistula holes, inflammatory infiltrates, purulent cavities, and leaks. Surgeries used spinal or general anesthesia and began with methylene blue contrast to map the fistula tracts. Surgical methods varied:

- Excision into the intestinal lumen – 241 (50.7%)
- Excision with sphincter closure – 172 (36.2%)
- Excision with ligature – 23 (4.84%)
- Segmental proctoplasty – 39 (8.21%)

For intrasphincteric and superficial transsphincteric fistulas involving less than one-third of the sphincter, excision into the intestinal lumen was performed, excising all stained tissues in one block or stages. Abscesses were opened and radically excised after contrast. The necessity for sphincter suturing was individually assessed based on preoperative manometry, gender, age, defect location, and muscle fibers crossed. Elderly women with anterior sphincter defects and high incontinence risk underwent suturing for one-third sphincter defects. Young men with posterolateral defects required suturing for defects exceeding half the sphincter circumference. Segmental proctoplasty or ligature methods were preferred for extrasphincteric fistulas based on fistula complexity. Complicated cases with purulent discharge or severe cicatricial changes precluded proctoplasty, favoring the ligature method with three ligatures tightened weekly until final thread eruption. Full-thickness flap reduction was rare, used in 3 (0.63%) cases. For recurrent extrasphincteric fistulas, radical excision into the intestinal lumen with complete sphincter crossing and suturing was done. Postoperative complications were low, with 6 (1.26%) cases, including suppurating wounds, gastric bleeding, early secondary bleeding, and suture failure leading to phlegmon.

CONCLUSIONS: Posterior and lateral fistula openings are most common in working-age men. Surgical methods are chosen based on fistula tract location, sphincter involvement, cicatricial changes severity, and presence of infiltrates and purulent leaks. Favorable initial conditions often allow excision into the intestinal lumen, with individual decisions on sphincter suturing. Radical surgeries in specialized hospitals yield low complication rates and favorable immediate results.

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