

## LAPAROSCOPIC RIGHT HEMICOLECTOMY AND OOPHORECTOMY FOR COLON CARCINOMA AND OVARIAL CYST OF A FEMALE PATIENT WITH PREVIOUS OPEN SURGERY AND BMI 37

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The laparoscopic approach to colectomy is gaining acceptance for the management of colorectal cancer. Advanced age, obesity, and previous abdominal operations are not more considered absolute contraindications for laparoscopic colon cancer surgery. We present a 77 year old female with ascending colon carcinoma, ovarian cyst, previous open cholecystectomy with postoperative hernia and BMI 37. Colonoscopy showed an endoluminal tumor /~5 cm. in diameter/ in the ascending colon. Endoscopic biopsy of the tumor indicated carcinoma. Computed tomography showed a solid tumor in the ascending colon, postoperative hernia and ovarian cyst /~8 cm. in diameter/. We treated the patient with laparoscopic adhesiolysis, laparoscopic right hemicolectomy and right oophorectomy. The length of incision was 8 cm in order to extract the specimen. Bowel function has been restored on postoperative day 3. The patient recovered completely with no postoperative complications and was discharged on postoperative day 9. The laparoscopically operated patients have less surgical trauma, less postoperative pain, better-preserved pulmonary function, less postoperative complications, earlier restoration of gastrointestinal function, shorter hospital stay and earlier return to normal activity.

**Key words:** ascending colon cancer, laparoscopic approach, laparoscopic right hemicolectomy

## THE ROLE OF TOTAL MESORECTAL EXCISION FOR LOW RECTAL CANCER TREATMENT

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Since first papers for the importance of Total Mesorectal Excision in the treatment of rectal cancer by Heald et al. many trials proved the fact that TME is crucial for long term survival and DFS. In this study we reviewed our results for middle and lower rectal cancer treated by anterior resection and abdominoperineal resection Miles and TME.

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# OPERATIONS OF PARASTOMAL HERNIAS AND COLOSTOMY PROLAPSE

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Parastomal hernia and colostomy prolapse are often seen late complications by the stoma patients. Different author's data vary 9 up to 37%, but the trust-worthiness is difficult to be estimated because of the different follow-up period. In addition far not all the patients with these complications look for surgical treatment. We have made a retrospective analysis of the 23 patients with the up mentioned complications who were operated in our clinic during the period 2006-2010. Seventeen of them had undergone previous operations in our clinic and the rest 6 in other surgery units. Gender distribution was male 14 and female 9. Patients vary from 63 up to 84 years of age. Seventeen patients were operated because of parastomal hernia 17, as 14 of them were with orificial and the rest 3 with paraorificial hernia. Six patients were operated on for colostomy prolapse. Nine of the hernias were operated via laparotomy and 8 via local parastomal approach. Fourteen cases were operated using synthetic alloplastic material (mesh) and in 3 cases autonomic tissue plasty was done. A partial resection of the colon, plasty of the stoma orificium and re-stomy was performed by 11 patients, including the 6 patients with colostomy prolapse. After the analysis of the data and circumstances we admit as predisposal and pathogenic factors for the appearance of such complications the increased intra-abdominal pressure (chronic constipation; chronic pulmonary obstructive disease), obesity; age depend ant degenerative-atrophy state and weakness of the muscular-fascial structures of the anterior abdominal wall. Last but not least is the position of the muscular-fascial stoma orificium in relation to the structures of the front abdominal wall. Nineteen patients or 83% were followed up for 6 to 24 months and no data for recurrence were fixed.

**Key words:** colostomy; parastomal hernia; colostomy prolapse

## SURGICAL, ONCOLOGICAL AND FUNCTIONAL OUTCOMES FROM INTERSPHINCTERIC RESECTION WITH OR WITHOUT COMBINED RESECTION OF THE EXTERNAL SPHINCTER: AS COMPARED WITH THOSE OF ABDOMINOPERINEAL RESECTION

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**Objective:** The aim of this study was to assure the validity of intersphincteric resection (ISR) with or without external sphincter resection (ESR). **Background:** The oncologic outcomes from these techniques remain unclear. **Patients and Methods:** To explore the feasibility of these surgical procedures, we have evaluated the tumor spread pathologically in 93 surgical specimens treated with abdominoperineal resection (APR). Then, these procedures were sub-classified as follows; partial-, subtotal- and total-ISR (P-ISR, ST-ISR, T-ISR), and partial- and extensive-ESR (P-ESR, E-ESR) depending on the volume of resected sphincter muscle. The Kaplan-Meier method was used to calculate the survival rates. **Results:** Based on a pathological pilot study, the surgical techniques were conducted in 83 patients who would be, otherwise have been treated with APR. Local recurrence (LR) developed in 12.5%, and radial margin (RM)  $\geq$  1 mm was the most powerful independent risk factor for LR after ISR/ESR ( $p=0.0025$ ). The recurrence-free 5-year survival showed no significant difference between ISR&ESR and APR procedures (73.3% vs 63.9%,  $P=0.3014$ ), but the cancer-specific 5-year survival showed significant difference (88.1% vs 71.6%,  $p=0.0204$ ) between the two groups. Anal continence was preserved in 54 % of the E-ESR procedures and in approximately 80 % of the P-ESR or ISR procedures. **Conclusion:** Both ISR and ESR procedures are surgically and oncologically acceptable. These procedures enable anal preservation in some patients in whom APR would be otherwise required. Appropriate preoperative treatments including chemoradiotherapy may be important to achieve safe RM and to control LR after ISR/ESR. Some modification of the E-ESR procedure is needed to improve anal function.

## PATHOLOGICAL STUDY WARRANTS INTERSPHINCTERIC RESECTION

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**Objective:** The aim of this study was to pathologically explore the feasibility of intersphincteric resection (ISR) with or without external sphincter resection (ESR). **Background:** Abdominoperineal resection (APR) has generally been performed for very low rectal carcinomas located less than 4-5 cm from the anal verge. Recently, there has been increasing interest in the use of ISR to treat such carcinomas, since this procedure removes the internal sphincter but preserves the anus. However, the theoretical evidence to warrant this procedure remains unclear. **Materials and Methods:** We have examined the distal and circumferential resection margins (DRM, CRM) to explore the feasibility of this procedure. Since 1982, 610 surgical specimens with rectal cancer were evaluated to clarify the DRM (Cancer 1995; 76:388-92). Until 2010, 213 patients have received abdominoperineal resection (APR), and the CRM was histologically estimated to clarify the invasion and/or metastasis into the anal canal structures (Dis Colon Rectum 2009; 52:1887-94). **Results:** Distal spread was rarely found in Dukes A, B and C diseases with curative surgery. The length of distal spread was less than 1 cm in most curative cases. As to the radial margin, the tumors were divided into two categories; Pa-cancer group whose lowest edge was located above the dentate line, and Pb-cancer group whose lowest edge was located at or below the dentate line. In the Pa-cancer group, the invasion and/or metastasis into the anal canal structures including intersphincteric plane was rarely found. In contrast, invasion and/or metastasis in the Pb-cancer group tended to extend into the intersphincteric space at a higher rate. **Conclusions:** Distal resection margin of 1 cm is appropriate in this procedure. ISR seemed to be feasible in almost all the Pa-cancer, and ESR seemed to be suitable in the Pb-cancer.

## PREREQUISITES FOR MISCALCULATIONS BY RADICALISM OF THE DISTAL RECTAL CANCER

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The total mesorectal excision (TME) is a “gold standard” for DRC surgery. The pathologist evaluates the TME and he is the referent for the surgeon’s work. The number of the pararectal RLN determinates the accuracy of TME and they must be at least 12 to be considered a complete excision. The R0 resection has a histological clearance for the distal resection line, for the circumferential border and TME. The criteria for the distal resection line are clear and there are no prerequisites for errors, but incorrect estimates for the TME and for the circumferential clearance are common. Often the pathologist has found less than 12 RLN, despite of the fact that the surgeon insists for a complete TME. The situation allows some reservations about the accuracy of the operating team. It is known that after a neoadjuvant therapy the RLN in the specimens of the DRC are reduced. When the mesorectal excision is incomplete the pathologist can find a circumferential cancer clearance, but it is possible for some cancer structures or metastatic RLN to remain in the minor pelvic. So the resection is R2 regardless of the histological proved circumferential clearance. One assessment of the pathologist for the completeness of the TME and for the presence of the circumferential clearance is difficult. The discussion, whether the excision is extrafascial or is with a transmesorectal plan of dissection and compromising oncological principles, is justified. A specimen oriented surgical technique, in our opinion, is the best way to support the operator’s pretending for complete TME. The technique achieves a similar macroscopic view for the DRC specimens even from different surgeons. The integrity of the own rectal fascia, which is attached to the rectal specimen confirms the extrafascial plan of dissection. Not cutting entire specimen is the condition for the pathologist to obtain clarity about the TME integrity. The exact macroscopic description, especially for the rectal fascia has priority for the evaluation of the TME more than the number of RLN.

So it is possible to identify the potential lacks of the mesorectal tissues. The transversal cuttings of the extraperitoneal part of the specimen with 1 cm thickness are for evaluation of the circumferential clearance. The circumferential border adjacent to the tumor or to the metastatic RLN is necessary to check histology to confirm the R0 resection.

Keywords: total mesorectal excision (TME), distal rectal cancer (DRC), regional lymph nodes (RLN)

## INDICATIONS FOR HARTMANN'S RESECTIONS FOR ADVANCED DISTAL RECTAL CANCERS

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**SUMMARY:** ADRC involves the adjacent structures and systems in the minor pelvis and the achievement of radical R0 resection is technically challenging. The main problem is to obtain the circumferential clearance and it could require resections of the ureters or the bladder. The restoration of the urinary tract integrity is obligatory, but if the gut passage is restored too, the complications are common. An additional indication for a two-stage operation like Hartman's procedure is the high rate of LR for ADRC. **MATERIAL:** 14 ADRC with T4 lesions are treated with radical Hartmann's procedures. Five interventions were combined with single ureter's resections, one was with both ureters resection and their implantation in the bladder and eight were with postoperative minor pelvis evisceration. **RESULTS:** The postoperative complications as urine leakage from the drains in the pelvis were found in three cases. They were treated successfully with an active aspiration through the urethral catheter for 10-15 days. The all posterior minor pelvis evisceration have taken place without complications, but after three of them LR were developed. The one was founded after a year and another - two years from the restitution of the gut's tract. There was one LR after interventions with ureter's resection. No operative mortality was registered. **CONCLUSION:** The Hartmann's procedures are indicated for some ADRC when the radicalism allows preservations of the levator muscles and sphincters. An bloc resection for circumferential clearance, when includes parts of the urinary system, requires a restoration of their integrity. The simultaneous gut restitution increases the risk for complications. The high LR rate by ADRC and the adjuvant radiotherapy are also an indication for a Hartmann's procedure. The reasonable term for the gut passage restitution is at the end of the first year of the operation, because most of the LR are developed in this period.

**Key words:** advanced distal rectal cancer (ADRC), sphincter preserving operations (SPO), local recurrence (LR)

## ДАЧОЕД АИЕ ААААЕИ×Д ААИЕ ДАЧАЕОЕЕ – ИИЕА ЧАИЕВ , ДАЧОЕОАОЕ

А. Аайи́ иа, А. Еи́н дааеи́а , А. Еи́д оеи́а, Í. Íа́ иеи́а, Í. Íу́дâ аи́а

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Чà пòаíáàðòíà ÷ðááíà ðàçàéöëÿ, íàé--àñòí ãóáåàñííí ííéíííàé--íèðà èçèñéààíéÿ ãà ïðèàíà ðàíèéíèàéòíèéÿòà, ðàçàéöëÿòà íà ãèàííàéàííòí ÷àðáí è ïðááíàòà ðàçàéöëÿ. Õàé íà ïðíó÷-àáíà òí à àà ãà ïðíó÷-à ò èíàèèàòèèòà è èðàòèííòí-íèðà ðàçóèòàòè ïò ðàçø èðáíè àááíèí÷-ðááíè ðàçàéöëèè ïðè íáííáð àíà àðòíà ïàòèáíè. Íàðáð èàè: Чà ãðíè ïò 10 à íàèíè (2001-2010) ãà èçáóðø áíè 1346 ïíàðàòèáíè íàíáñè ïðè ïàòèáíèè ã àáááíí÷-ðááíà ïàòí èíàéÿ ãóñ ãèááíèòà èíàèèàòèè: Æèááðòèéóèíçà – 21, ððíèè ÷áí óèòáð ïàñíð ààè÷áí èíèèð – 25, àèòóçíà ï íèèíç à – 16, èíèðð àèòàèáí ðàè – 1284

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## ANAL FISSURE - HEALING METHODS. ELEVEN YEARS OF EXPERIENCE

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**Material and methods:** For 11 years, 331 patients with anal fissures have been treated at the clinic. Distribution by sex was 170 men to 161 women. **Diagnostic methods:** History and general and surgical status; Laboratory methods: PKK, biochemistry, ESR, urine examination and bacteriological anti-biogram; Examination of the anal area; DRE; Probing the fistula; anoscopy; Endoano ultrasonography with and without the injection of hydrogen peroxide in the fistula; fistulography; CT, MRI, Anal sphincterometry; examination of recto-anal inhibitory reflex. **Therapeutic methods:** Conservative methods: Use of nitroglycerin ointment for medical sphincterotomy in patients with acute anal fissure. Application of ointment nifedipin medical sphincterotomy in patients with acute and chronic anal fissure. Intra sphincter application of long-acting local anesthetics and flosteron in patients with acute and chronic anal fissure. Operating methods: Anal dilatation. Anal dilatation with curettage of anal fissure in patients with chronic fissures. Anal dilatation with excision of the fistula, with or without subsequent suture of the mucosa. Lateral sphincterotomy in patients with chronic anal fissure. Rear sphincterotomy in patients with chronic anal fissure located at 6 o'clock in the gynecological position. Curettage and sculpture with mucocutaneous flap in patients with chronic anal fissure. Cryo-destruction. Method assessment of incontinence Subjective - questionnaire. Method sphincterotomy - objective. **Statistics:** Descriptive statistical methods. Parametric and non-parametric methods for comparing groups - chi square, Student t test, Anova **Discussion:** Before performing the surgery is important objective assessment of functional status of the anal sphincter. In clinical practice, any interference on the anal canal and distal large intestine segment should not be made without prior examination of sphincter tone. It is necessary to know how surgery may affect incontinence, which in turn determines the appropriateness of one kind or another treatment.

# ΑΙΟΙΑ Α ΕΕ Α ΝΑΙΟΕΙΑΕ ΙΑΟ Α ΕΕΙ ΟΙΑ ΑΕΙΝΕΒ ΣΑΑΕΑΙΑ ΑΙΑ ΟΑ ΕΕΕΙΕ×ΙΑ ΙΘ ΑΕΟΕΕΑ ΙΘ Ε ΙΑΟΕΑ ΙΟΕ Ν ΕΑΘΟΕΙΙ ΙΑ ΑΙΕΙΑ Ε ΝΔΑΙΑ ΟΔΑΟΙΑ Δ ΑΕΟΟΙΑ?

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Çà ðàççè èà ìò ðàé à ìà ìèà ÷ìàðà æéàçà è ì àèèà ìáíèý ì àèáñì , ìðè ð àèà ìà ðáé ðóìà àñà ìù à éííóáíðèýòà çà áéíñèý ìà ñà ìòèáéíè èèìíèé áúç èè (ÑĒĀ) ìà á ìáíúéí ìðèèíæèà. Ā ðááèòà ìðíó÷áà ìèý çà èàðòèíì ìà ðáèòóìà ñà ìñí÷á àð ìí-ìèñèà ÷ó àñòáèòáèíñò,ñíáòèòè÷-íñò è èííóìàòèèáíñò ìà ìáòíà. Óáè: Āà ìðíó÷è á èíè ñèó÷ àè ñáíòèáéíàòà èèìíèé á ìááæááí ìáòíà çà ñíáíðýááíá ìà ñòááèð áíáòí ìð è ìáòèáí ðè ñ ðáé ìà áíèíáð à è ñòááí à ððáòà ìà ðáèð óìà. Ìáòáðèàèè è ìáòíàè: Ēç ñèááááíè è ñíáðèðáíè áýòà 86 ìáòèáíòè ñíáðèðáíè çà ðáè ìà áíèíáðà è ñòááíá ððáòà ìà ðáèð óìà çà ìáð èíá ìò 3 áíáèíè ñúááðàç ìí èíèáè èçáòè ÷òà è ñòááèý ìà çááíè ýááíáòí. Ī ðè 20 ìò ìáòèáíòèòà ñà ìðèèíæè ððèèñííáíáòáí ìáòíà çà ìáðèèð áíá ìà ÑĒĀ ñ ìðááñíáðáðèèáñ èíæáèòèðáíá ððáíñ ááíáèñ, ñòðíá í ñóáíóéíçí ìà ðááè ìèíèíèä Nanocoll Tc<sup>99m</sup> è ññèá áááù í èíòð áñíáðáð èáñí èíæáèòèðáíá ìà Pat ent Blue V. Ā èáðáðáèíèòà èèááíáíòè ìà ð áèòóìà ñà èíæáèòèðà èíòðáñíáðáðèèáñ Indocyanine green. Īðè ññòáíáèè ðá 66 ìáòèá ìòè ááø á èçñíè çááí ì áòíáà ìà èíò ðáñíáð áðèáñí èíæáèòèðáíá ìà áááòà áááðèèá. Āñè÷èè ÑĒĀ áýòà èçèááááíè èíóñò èñòíòèèè÷í. Āáøá ìáòáááí ñòáðèðòè÷áñèè áíáèèç ìà ðáçóèòáðè ñ áèèð÷áíè ñèáçáðáèè: áèáíáòúðà ìà ðóíñðà, èíèáèèçáòèý, èèìíèé èíáçèý, BMI, ðñáð áðèý ìà ÑĒĀ è áð. Ðáçóèòáðè: Īáè – ìáèéí ááèí ÑĒĀ Ā ááøá ìòèð èò á 85% ìò ñèó÷áèòà. Óñíáòñ ìáðèèðáíè ÑĒĀ ìðè ððèèñ ñíáíòèý ìáòíà áýòà á 17 ñèó÷áè. Óðè ìò ðýò áýòà ðáèò èáñ ìáá áðèáíè. Óñíááááñ ðòà ìà ááóèíñí áðíóí ì áðèèð áíá á 83.3%. ×óáñòáèòà èññòð à á 42.9%. Óáè ø èáñ ìáá áðèáíáòà ÷áñòíòà á 57.1%. Ēçáíáè: Āíèáíè ìáòà ìà ðóíñð à, èèì óñí- ñúáíáòà èíááçèý, ìáèè÷áòí ìà ìýíèíèí áíá ðñè÷èè ááñáéíá ìà èèìíòè÷áíá, ñà èò áíèý BMI ìèáçááò ìáááòèèáí áðáèð áúðòò ðáçóèòáðèòà ìðè ìáðèèðáíáòí ìà ÑĒĀ ìðè ð áèà ìà ðáèòóìà. Īðááñíáðáðèíáòà ñáèáèòèý ìà ìáòèáíòèòà ñ ðáè ìà áíèíá è ñòááíá ððáòà ìà ðáèòóìà ñæá áá áíá ááá áñ ñíáíðýááí á ìà ðáç óèòáðèòà, ñèáòóññ ðòà ìà ì áòíáà è áúáá æááíáòí ì ó á áæááíáíáòà èè èíè÷á ìáèèèèá.

Ēèð÷áíè áóíè: ñáç ñà ñèçòá, ñèíñèñíè ìíçñíè ÷èçíè

## SELECTION OF DIRECT OR RECONSTRUCTIVE ANASTOMOSES FOR DIFFERENT TYPES OF SPHINCTER PRESERVING OPERATIONS

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**INTRODUCTION:** The limited distal invasion for an extraperitoneal DRC is a prerequisite for the SPO increasing. The expressed ARS is typical for more of the distal SPO, especially when they are combined with an adjuvant radiotherapy. **OBJECTIVE:** A retrospective analysis determine the indications for direct or for reconstructive anastomoses about the different kinds of SPO on the basis of the functional effects and the complications. **MATERIAL:** 162 SPO have been implemented for a DRC. The low and the ultra-low anterior resection were 60, the proctectomies – 80 and the intrasphincteric resections - 22. The direct anastomoses have been 78 SPO and the other 84 have been reconstructive ones - 50 latero-terminal anastomoses, 9 operations with a coloplasty and 25 j pouches. **RESULTS:** Clinically significant insufficiency were found after nine total proctectomies with direct anastomoses and without protective ileostomas Expressed ARS was observed



mainly after direct coloanal anastomoses by patients over 65 years. The syndrome is minimal when the j pouches were applied. **CONCLUSION:** The amount of a distal resection of the proctium, the adjuvant therapy, the age and some morbid conditions determine the need for reconstructive anastomoses to prevent the ARS.

**Key words:** distal rectal cancer (DRC) sphincter preserving operations (SPO) anterior resection syndrome (ARS)

## 15 YEARS EXPERIENCE IN TREATMENT OF THE RETRORECTAL TUMORS

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**PURPOSE** Tumors occurring in the retrorectal space are heterogeneous and uncommon. The utility of newer imaging techniques has not been extensively described, and operative approach is variable. This study examined the diagnosis, treatment, and outcome of retrorectal tumors at a tertiary referral center. **METHODS** Patients with primary, extramucosal neoplasms occurring in the retrorectal space were identified using a retrospectively maintained, procedural database of all adult colorectal surgical patients (1996–2010). Exclusion criteria included inflammatory processes, locally advanced colorectal cancer, and metastatic malignancy. Medical records, radiology, and pathology reports were reviewed retrospectively. **RESULTS** Thirty-nine patients with retrorectal tumors were treated. Malignant tumors comprised 21 percent. Older age, male gender, and pain were predictive of malignancy ( $P < 0.05$ ). All benign tumors were resected with normal histologic margins and none recurred. Nine patients with malignancy had recurrence/recrudescence of their disease. **CONCLUSIONS** Retrorectal tumors remain a diagnostic and therapeutic challenge. Pain, male gender, and advanced age increase the likelihood of malignancy. Various imaging modalities are useful for planning resection but cannot establish a definitive diagnosis. Whereas benign retrorectal tumors can be completely resected, curative resection of malignant retrorectal tumors remains difficult.

**Key words** Retrorectal tumor - Presacral tumor - Chordoma

## MALIGNANT MELANOMA OF THE ANUS AND RECTUM

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There is approximately 300 cases of malignant melanoma written in the world literature. We write up 13 operated from us for 15 years cases of melanoma of the anus and rectum – seven males and 6 females. The neoplastic localization is usually at linea dentata area. The patients complains are foreign-body filling and rectohaemorrhagy. This formation considers like haemorrhoid frequently. The pain is not common symptom but ulceration occurs in many percent. The metastasing is in the inguinal lymph nodes. The tumor colour is between light-brown to red-purple in 50% of the cases. The colouring matter is absent in the other half of the cases and these tumors consider like nonpigmentous melanoes achromatic variety was in three of our patients – 23%. All of patients underwent Miles procedure. Despite the complex treatment – surgical, chemotherapy etc. the prognosis is at large poor. Free-disease survival was 18 to 30 months approximately.

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## TREATMENT OF ANAL FISTULA, A BALANCE BETWEEN EXCELLENT OUTCOME, RELAPSE AND INCONTINENCE.

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For the past 11 years, we treated 286 patients with anal fistulas. Distribution by sex was 224 men to 62 women - 3,6:1. **Diagnostic methods:** History and general and surgical status; Laboratory methods: PKK, biochemistry, ESR, urine examination and bacteriological microbiogram; Examination of the anal area; Rectal examination; Probing of fistula; anoscopy; Endoanal ultrasonography with and without the injection of hydrogen peroxide in the fistula in progress; fistulography, CT, MRI, Anal sphincterometry; examination of recto-anal inhibitory reflex. **Therapeutic methods:** fistula break and curettage in patients with inter-sphincter anal fistula. Removing of fistula in patients with inter-sphincter anal fistula. Partial removing of fistula, curettage and elastic ligature in patients with trans- and extra-sphincter anal fistulas. Removing of fistula entrance to the level of the external anal sphincter, curettage and plastic recovery of the internal hole with mucocutaneous flap. Plastic restoration of the internal opening, partial removal of fistula until the external sphincter, curettage of fistula trough sphincter complex and sealing the fistula opening and wound with fibrin glue. Plastic reconstruction of the rectal wall in place of the internal opening through the implementation of TEN at high complex fistula, partial removing of fistula to the sphincter complex, curettage of the remaining fistula and sealing fistula with fibrin glue. Front commissurotomy with plastic of external sphincter and left thoroplastica. Formation of colostom with subsequent plastica of the perineum. Method assessment of continence Subjective - questionnaire. Method sphincterometry - objective. **Statistics:** Descriptive statistical methods. Parametric and nonparametric methods for comparing groups - chi square, Student t test, Anova. **Discussion** Before performing the surgery is important objective assessment of functional status of the anal sphincter. In clinical practice, any interference on the anal canal and distal rectum segment should not be made without prior examination of sphincter tone. It is necessary to know how surgery may affect continence, which in turn determines the appropriate choice of treatment.

## ANAL SPHINCTEROMETRY , TYPES, METHODS, APPARATUS, INTERPRETATION OF RESULTS

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For the first time in history, anorectal tonometry for the evaluation of anal sphincter tone was applied by Laeven in 1928. Later, Gaston (1948g.) V.N. Demi (1954g.) C. Yanchev (1959g.), A. M. Aminev (1965g.) and others offer new designs for sphincterometry and improved methodology. Registration of the pressure gradient in anus-rectum with hydro-perfusion system was first carried out by Hill et al. in 1960. In 1974, Holschneider et al. apply the method for differentiation the forms of chronic obstipation. Recorders used today are: perfusion catheters, micro-balloons, catheters type sleeve, strain gage transducers and devices for ambulatory sphincterometry. In interpretations of the results, one must take into account the age, surgeries performed, current medical status at the time of the survey, the equipment and the protocol of the study. Sphincterometry itself is not the gold standard in assessing the functional status of the anal sphincter, but is a basis for discretion in determining the treatment plan and the results obtained and the degree of incontinence before and after treatment.



# ÐĪĒΒ ĪÀ ×ĪÂ ÅØ ÈÈΒ ĨĒÈĨ ĀÍ ÂÈÐÓÑ JC Â ĨĒĪÂĀĪĂ ÇÀÒÀ ĪÀ ÊĪÊĪÐĂ ÊÒÀĒĪÈΒ ÊÀÐÖÈĨĨ

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ĀèðóñĪāðā ĨĒ ĨāĪĪ çā ā āĪēāç ĪĪā Ĩðē ĨŷĒĒ āēĪĪāā ð āē, ĪāĨ . ðāēú ò Īā Īāò Ĩ=Īāòā ø ēēēā Ĩā Ĩāŷçāā Ĩ ēĪōāēōēŷ Ĩ =Īāāøēēŷ ĪāĒēĪĪĪĪ āèðóñ, Ĩúðāē=Īēŷ =āðĨĪāðĪĪĪ ēāðōēĪĪ - Ĩ ðāĪāòēð Β āèðóñā , ēēĪōĨ ā Īā Bur kitt – Ĩ āèðóñā Īā Ep stein-Barr. Ā ĨñēāāĪēðā āĪāēĪē Ĩā ç āñēēē ēĪðāðāñú ò Īā ĨĪĪĪ ēçñēāāĪāðāēē ēūĪ āú çĪāē ĨðĪ āèð óñĨ ó=āñðēā ē ā ēĪēĪð āēðāēĪ āðā ēāðð ēĪĪā Īāçā. Ī āēēōā Ĩā ĨúðāĪĪā=āēĪē āāĪē çā āúçĪāēĪā āðúçēā Īāæō ēĪōāēōēŷðā Ĩ =Īāāøēēŷ ĨēēĪĪĪ āèðóñ JC (JCV) ē ðāçāē ðēāðĪ Ī ā ēĪēĪð āēðāēĪ ēāðð ēĪĪ. Ôāē Īā Īð āñðāāĪĪĪ Ī ĨðĪó=āāĪā ā āā Ĩā Ī ðāāñðāāŷð ē Īāñúā ŷð Īāēē=Īēðā ēēðāðāðōðĪē āāĪē, ēāēōĪ ē ĨĪā ĨðāāĪē ðāçóēðāðē çā ðĪēŷðā Īā JCV ā ĪāðĪĪāĪāçāðā Īā ðāēā Īā āāāāēĪōĪ ē ĪāāĪō Ī =āðĪĪ. Ī āĪðāāĪ ā Īðāā ēāā Īā Īōāēēē ðāāĪēðā ðāçóēðāðē Īā ð āçēē =Īēðā ēçñēāāĪāðāēñēē āðōĪē. ĨĪāñðāāĪēðā ĪðĪó =āāĪēŷ āēçĪ=āāð ēçñēāāāĪā Īā ĪðĪāē Īð 40 ĪāēāĪēðē Ĩ ðēñðĪēĪāē=ĪĪ āĪēāçĪ ēĪēĪðāēðāēĪ ēāðōēĪĪ, ĨāðēðāĪē ā ÊēēĪēēāðā Ĩ Ô ēððāēŷ Īā ĪÈ – ĪĀÐ. Īāðāð ēāēēð ā Ĩā =āñðē Īð ðōĪĪðĪā òú ēāĪ ē Īð Ĩð ĪāēĪā āāāāēĪ=ð āĪĪā ĨðĪā, ēāēōĪ ē Īð āāāĪāð ĪçĪē ĨēēĪē, āēĪ Ĩā Īāēē=Īē ā ðāçāēðāĪēŷ ĪðĪāðāð. ÔúðñāĪē Ĩā āèðóñĪē ĀĪĒ ĨñēāāĪāðāēĪĪñðē, ēçĪĪēçāāēēē ĨðāĪāāððēçēðāĪā ĪāðĪāēēā çā ĀĪĒ āēñððāēōēŷ ē ĨēēĪāðāçĪĪāāðēēĪā ðāāēōēŷ Ĩ ĪðāēĪāðē çā āèðóñĪēŷ Ô=āĪēāĪ ē ĪāēĪāēðāū ēŷ ēĪñðĪēĪā ðāāēĪĪ. JCV ĪðēĪāēēāēē ēūĪ ĨāĪ. Polymaviridae. ÊçĪēð āĪ ā Īðā ç 1971 ā. Īð Ĩç ŷēā Īā Īāð ēāĪð, Ĩððāāāū Īð ĪðĪā ðāñēĪā Īā òēðēð ĪēāēĪā ēāāēĪāĪāðāēĪĪāðēŷ. Āúā āèðð ĨĪēŷ āāĪĪ ā ēĪāēðāĪ Ô=āĪēāĪā, ēĪēōĪ Ĩā Ĩ=èðā, =ā ēĪā Īāē=āĪēŷĪā ðĪēā ā ĪēĪāĪāĪāçāðā. Āēñēāðā ēāĪēðĪāĪĪñðō Īā JCV ā āĪēāçāĪĪ Īā ðāçēē=Īē ĨēðĪē æēĪĪðĪē. Ēā āĪēāçāðāēñðāā çā Īðēñúñðāēā Īā JCV āāĪĪ ē Īāē=ðāç ēē=Īē =Īāāø ēē ēēāðēē. Ĩ=èðā Ĩā, =ā āāāāēĪ=ð āĪāĪāðā ĪōēĪç ā ā āúçĪ ĪāēĪā ðāçāðāĪāð Īā ðĪç ē āèðóñ. Ô āēāēĪĪ= ĪðāēĪ ēŷ ĪāðĪā ēçūĪ ā āāēĪ Īð ĨñĪāĪēðā çā çāðāçŷāĪā Ĩ JCV, ā ēĪōāēðēŷðā ĪāēēĪāāĪĪ Īāðñēñðēðā ĨāēçĪĪāĪĪ. JCV ā ĪðēðēāĪā ā ðōĪĪðē Ĩ Ī ðĪēç ðĪā Īð Īāð āĪāðā ðūēāĪ: æēĪāēāñ ðĪē, āñððĪð ēðĪē , āĪāĪāēĪ Ĩē, Ī āāōēĪāēāñðĪ ē ē āð., ēāēōĪ ē ā ĨðĪāĪōĪē ē ēĪēĪðāēðāēĪē ēāð ðēĪĪ Ĩūū āñðāðāð ĪðĪó=āāĪēŷ Ī Īēāçāāū ē āçāēĪ Īāāēñðāēā ðĪ Īā Ô= āĪēā āĪā Ĩ ðōĪĪðñ òĪāñĪðĪē ŷ āĪĪ p 53, Ĩ āĪĪā Rab51 ē āð. ē ĪāðĪ āĪð ēĪāñŷ çā āĪĪāðēðāĪā Īā āĪĪāðē=Īā ĪāñðāāēēĪĪñðō ā ēēāðēðōā, Ĩūāūðāēāū ē JCV. Ĩūū āñðāðāðāð ē āððāē ĪāðāĪēçĪē – ó=āñðēā Īā āèð óñĪē āāēðōúð ē, ēĪēōĪ Īē āçāāð āēēŷĪēā Īā ð òĪĪðĪāðā Ī ēēðĪñð āāā ē ĨñĪĪāñð āāð ðāçāēðēāðĪ ē ĪðĪēðāðāðāðēŷðā Īā ðōĪĪðĪēðā ēēāðēē; ēĪōāā ðāðēŷ Īā āèðóñĪā ðā ĀĪĒ ā ĨðāāāēāĪē ó=āñðōúðē Ĩ ðĪāð. „Ī Ī=èð āðēā” Ĩððōēðōðā, Ĩ ēĪāðĪ Ĩā Ī āððø āāā āāĪ āðā ðāāðēāðēŷ ē āð. Īāē= āāðĪŷōĪ Ī JCV ó=āñðāā Ĩ ðāçēē=Īē Īā=ēĪē ā ēĪēĪðāēðāēĪāðā ĨĪēĪāĪāçā – āèðāēðĪ ē ēĪāèðāēðĪ. ĨðāāāēŷĪāðĪ Īā òĪēēāçĪ ē ĨðĪñðāĪ Īāðā ĪēçūĪ, Ĩ ēĪēōĪ āèðóñūð āāēñðāā Īā ā ā ŷçĪāēĪĪ. ĪŷĪē Īð āðāēðēðā Ĩā ððāĪçēðĪðĪē ē āēēŷŷð Īā ðōĪĪðĪāðā ĪðĪāðāñēŷ ā ĨðāāāēāĪē āðāĪē. Īāø ēðā ðāçóēðāðē Ĩēāçāāð Īāēē=ē ā Īā JCV ā 12 ĪāðēāĪð ē (30%). Ī ðē 10 Īð ò ŷð Ĩā Īðēð ēāāĪē āèð óñĪē ĀĪĒ ĨñēāāĪāāð āēĪĪñðō ē ā ðōĪĪðĪāð ā ðūēāĪ. Īðē ĨñðāĪāēē ðā 2-Ī ā Ĩçēð ēāāĪ ðāçóēðāð ā ðñðāĪĪāā Ī ā ĪðĪāāðā Īð ĨðĪ āēĪā ēēāāēō ā Īðē āā ēĪēŷ ē ā Ī ðĪāāðā Īð āāāĪāð ĪçĪĪ Ī ĪēēĪ Īð ē āððāēŷ āĪē āĪ Īðē ĪāāāðēāĪā ðāçóēðāð çā ðōĪĪðĪāðā ðūēāĪ. Īðē 5 ĪāðēāĪēðē Ĩā ĪāĪāðāĪē ē āāāĪāðĪçĪē ĨēēĪē ā ðāçāðēðāĪ āðā =āñðō Īð āāāāēĪōĪ = āðĪĪ, ēāðĪ ā 4 Īð Ĩā ðñðāĪĪāĪē JC V Ĩñē āāĪāðāāēĪ Ĩñðē. Ī ðē āāēĪ Īð ĪāðēāĪēðēðā ā ðñðāĪĪāāĪĪ Īāēē=ēāðĪ Īā JC āèðóñĪē =āñðēðē Ĩā Ĩ ā ĨēēĪ, ā Īðē āāĪā Īā ó ĨðāĪĪāāĪĪ Īāēē=ē āðĪ ēĪ ē ā ĨðĪ āēĪāðā ēēāāēō ā. Īāç āāēñēĪĪ Īð āĪēā Īēŷ āðĪē ĪðĪó=āāĪēŷ, āñāĪū ā ðĪē ŷðā Īā JCV ā ēĪēĪð āèðāēĪ āðā ĨĪēĪā āĪāçā Ĩā Īōæāāā Īð ēç ŷñĪŷāĪāĪā. Ī ðāēĪ ā Ĩ āāçĪĪĪ ĪðĪĪ Īā= ēĪ āā Ĩā āĪēāæā, =ā ēĪōā ēōēŷðā Ĩ JCV āāæĪā ð ēñēĪā ðāē òĪð çā Ĩŷŷā Īā ēĪē Īðāēð āēĪā ēāð ðēĪĪ. ĪāĪāðĪāēĪ Ī ā āā Ĩā ðñūāūððāĪĪñðāāð ē ĨðāĪāāððēçēðāð Ī āðĪāēðā çā āāðāēōēŷ Īā JCV ā ðōĪĪðĪēðā ē ĨðĪāĪēðā ðūēāĪē. ĀāæĪā āūĪðĪĪ ā āāēē ĪðēñúñðāēāðĪ Īā JCV ā ðāçēē=ĪĪ ā ðōĪĪðē ā ðāçēē=āĪ Ĩðāāēē, ā ĪðāēĪāĪāðĪçĪēðā ēāçēē ē ā ĨūñāāĪēðā ĨðĪāĪē, ĪāĪðĪāĪāĪē ðūēāĪē. Ā ððā āñĪāēð ā āā Ĩā çāāūēāĪ=ā ð ĪðĪó=āāĪēŷ ðā Īā ēĪōĪēŷ Īðā ĪāĪð ēūĪ JCV, ēĪāðĪ ā āú āāū ā ŷ ā ĨñĪĪā Īā çā ðāçðāĪĪ ðāāĪā Īā Ĩð ðāðāāēŷ çā āðāāēēāðēŷ Īā āèðóñā Īð =Īāāø ēāðā Ĩñðēāðēŷ .





# ΑΑΑΑΕΙ×ΔΑ ΑΙΕ ΟΝΕΙΛΕΙΑΙΕΒ ΙΑ ΙΑ ΕΔΙΟ Ε×ΙΕΒ ΙΑΙΕ ΔΑΑΟΕΟ

Α. Αδεαίδια, Α. Οδενοία, Α. Ιε θαεία

*Втора хирургична клиника, УМБАЛСМ „Н. И. Пирогов”*

Αίααεδαίαοι ία αάααείοι +αδái á ðγáεí, ή πoáíoεáεήí εάoαεήí ó πείαείαεία ία ίάεδίοε+ίεý ίο ίαίεδααοεο. Νoáυ à πá ίoε ίείεí 1% ίo áñε+εε ίαoεáίoε π ίñoúð ίαίεδααοεο è ίoε 6-40% ίo ίαoεáίo εoá π ίáε ðíoεç εoáυ à oίoι à ίá çááίε γááίáoι. Α πáááι πáεο ή (2004-2010) ðáoðíñí áεoεáíí ίoίo+áá ίá ίáoááυáυ ί ίáoεáίoεoá π ίñoúð ίαίεδααοεο εάεoáá ίε á oεðoðáε+ίεoá εεείεεε ίá ΟΙÁ ΑΕΝΙ „Ι . Ε. Ι εδία ία” πá oñoáñíááίε 12 πē ó+áγ π ááááεí+ð ááίε oñείαείáί εý. Αί áεεç εoáð πá áεááññoε+ίεoá è εá+ááίε ίoίáεáίε ίá oαçε áoóíá áίίε. Νúυ áñáoáá εçááñoía εíðáεáoεý ίáçáo oáçáñoá ίá ίáεð ίoε+ίεý ίáίεð ááoεο è ðáçáε oεáoί ί à oñείαείáίεý è ίo πoð áíá ίá ááááε ίoί +áðái (10). Ιáoίε ίáíáíáo ηε+ήí πá ίáíáð áίε: ί ðáoίð áoεý (4) è ίáεð ίçá (8) ίá ááááείo ί +áðái. Αίεø είñoáío ί ίo ηεó+áεoá (9) πá πñ çáñýγááί á áεñoáε ίáoá oðáoá ίá co lon transversum è flexura coli sin (lienalis). Ιðáñíoú +áá πá ίεñúé ίoáá ίá áíoíáíño çá ðáçáεoεý è ίoίεñεíáείá ηoíá. Εάoáεεoáoúo ίñoááá áεñíε - 41.67%.

## ΔΑΑΕΕΑΕΙΕ ΠΑΔ ΑΟΕΕ ÇΑΕΙΕΙ-ΔΑ ΕΟΑΕΑΙ ΔΑΕ – 10 ΑΙΑ ΕΟΑ Ι ΙΘΑΑΕΑ – ΕΑΕΑΙ ΝΑ Α ΙΘΙ ΑΙΕΕΙ?

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Οάεε: Α oίç è ίáoáð εáε ðáçáεáçááι á πáðε ðáíεð á ίo ίáñ áίε ίε π είε ί-ðá εoáεáί ðáε ç à 10 áíáεø áí ίáðείá. Ιáñúçááíá ðááεεáείεoá πáðáoεε çá εáðoείñε ίá είείá è ðáεoóíá η ί oño áίεá ίá πáðáo εáíáoá oáoίεεá è ίá π oááεý ίá ç ááίεγááίáð ί. Αίáε εεçø áíá πño πáðáo εáίεý ί ίoáεáεo áo, ðáoεáεáεoá è ίoáçεáγáíñoá. Αá ðáçáε áááíá εáεáε ίoñáίε πá ίáñoúίεε çá oίçε ίáðείá á ίoááείε áñíáεoε ίá ίoίáεáíá? Ιáoίáε è áίίε: Εáðoείñε ίá ááñίεý oáίεείεíñ è είεíñ oðáíñááðçoί ί. Ιáðáoεýoá áεεπ+áá áγñíá oá ίεéίεáεoñεý, εáoί ίoε είεáεεçáoεý á είεíñ oðáíñááðçoί πá ðáçø εðýáá η ðáçáεoεý ίá ηñεááίεý ááεεááðáoεý ίá oεáεño ðá εεáίáεεñ; εεí oía áεñáεoεý η oía à ίá ááíá ίáçáíoáðεεá ηoίáðεíð, εεáεoáíá ίá áðoáoεý εεáí-είεéεá, είεéεá ááεñoðá è ίááεý á áεεçíño áí áðoáoεý ίáçáíoáð εεá ηoίáðεíð. Εáðoείñ ίá εááεý oáίεείεíñ. Ιáðáoεýoá áεεπ+áá εýáá oáίεéίεáεoñεý, εεáεoáíá ίá áðoáoεý è ááíá ίáçáíoáð εεá εíoáðεíð è ίáðáíðoáείá εεío ίá áεñáεoεý. Είááoί πá áíáαçεoáίε è εεíoίε áúçεε η oía ίá ááíá ίáçáíoáðεεá ηoίá ðεíð, πáðáoεýoá πá ðáçø εðýáá è πá εçáúðø áá ηoáoíoáείá εεε oíoáεíá είεáεoñεý η ðáçø εoáíá εεíoía áεñáεoεý η oía ίá á áíá ίáçáíoáðεεá ηoίáðεíð. Δáεoί-ñεáíñεááί εáðoείñ. Δááεεáείá ίoááíá ðáçáεoεý (RR A) πá εçáúðø áá ίoε oóίíðε ίáá 3ñí ίo á ηí-ðáεoáείáoá εείεý. Εεá εoáo πá ηñoááεήí áðoáoεý è ááíá ίáçáíoáðεεá εíoáð εíð; εçáúðø áá πá áεεéεá+ía è ίá ðáíðoáεíá εεíoía áεñáεoεý. Ιðε ίεñεε ίð ááίε ðáçáεoεε áεñoáείáoá ðáçáεoείíá εείεý á ηá 3 ηí ίo oóίíðá. Ιðááñoááγíá ðáçεε-ίε ηíñíáε çá ηñúú áñoáýááíá ί á áíáñoíñç à ίoε í ðááίε ðáçáεoεε. Ιð ááñ+εoá πá εçáúðø ááíáoá ίá áíáñ oíñç à ηúñ ηoáίεáð. Αááñεήí-ίáðείááείá ðáç áεoεý ηá εçáúðø áá ίoε oóίíðε ίá ηí-íáεéí ίo 3ñí ίo áñ-ðáεoáείáoá εείεý. Ιðε ίáñðoóεoεááί εεáoñ ί o ðεáíñ-ð áεoáεáί εáðoείñ πá εçáúðø áá πáðáoε ýoá ίá Οáðoí áí; εε è πáðáo εýoá πá ðáçø εðýáá á ηoáoíoáε ίá εεε o ίoáεíá είεáεoñ εý η εçáúðø ááíá ίá áíáño ηíçá. Çá ίáðείáá 2001-2010á ηíá πáð εoáε è 975 áίείε η είεí- ðáεo áεáί ðáε. Ιá áúçðáño ίo 32 áí 91 á ίáίε. Εçáúðø áίε ηá áεε è áγñíá oáí εéίεáε oñεý - 247; ðáçáεoε ý ίá είεíñ oðáíñ ááðçoί - 21; εýáá oáίεé ίεáεoñ εý - 69; ðáçáεoεý ί á ðεáí áoá - 51; ίoááíá ðáçáεoεý ίá ð áεoóíá - 314; πáð áoεý ίá M íles - 116; πáð áoεý ίá H artmann - 111; είεáεoñ εý - 46. Ιð è ðáíí è áñ-ð áεoáεί è εáðoείñε πá εçáúðø áá είεáείá ðáçáεoεý, ηñεááááíá ίo εú+áoáðáίεý - 3 á ίείε. Δáçoεoáoε: Αίίεíεoá πá ηoááεeðáίε εáoί TN M I - 26%, II - 36%, III - 26% è IV - 12%.. Οεñoίεíá ε+ήí ááááίε áðoεί ηεoá πá á

95,3%. Înoð ðàíáíε ðà èèì óíε áúççε ñà ïò 5 àí 42 áðíŷ , èàòí ï áòàñòàè-íε ñà áεεε ïàíεε áíε ïò 1 àí 18 áðíŷ. Ì ñòñíáð àðεáíε òñéíáí áíεŷ – éíñ óðεèáíòεŷ ïà áíñòí ïçàòà, áíáà ù à áí ïáðáç óááíá ïà ðεñòòεà – ðŷáéí á á áεíε-íε ñεó-àε ñεáá ááñíñòðàííε èεε ñóá /óíòáεíε εíεáεòííεε; ïðε RR A – á 13,7%. Ìð ïεñéíáε ïà ñòñíá á áεèà εç ááááíá ñ- εúñíñ ïð ε 29,6% ïò áíεíε ðà ñ ðε ñòòεà èεε ï ðε 4% ïò áñε-èε áíεíε. Ìñòáíáεèòà ñà εççáεòá áíε òñíáø ñí εíñáðáàðεáíñ. Ìðááñòááŷ ñ á ááòáεéíá εíóíðíáòεŷ ïòíñíñ áεñí-εíáòà ïà áíáñòíñçεòá ïà ðáεèòíá ε εíñó ðεèèáíòεε. Ìðòáεèòáòóòó á 5% (16/313). Ëíεáεíε ðáòεáεáε ïðε ñεáíñ-ðáεèòáε ïε εáðòεñíε 18% -áúεáε ñà ïà ïáíðááíáεε ðóíñðε. 3-áíáεø ïáòá ε 5- áíáεø ïáòá ïð áεεáŷáí ñò ñà 69% ε 56%. Ñéááñíáðáò εáíñóí ïááε þááíεá áεε þ-áà ÓÇÁ, ÊÒ, ïáð εáðε ÑÁÁ ε ÑÁ19-9. Ìáñúε ááíá: Ì ðááε áíá- àðεáíε á íáíáε ŷááíáòí ïà áíε ïεòá á Ì ñòááεε ε óááεε-áááíáòí í á áíεíεò á á IV ñ ðááεε. Ðááεεáéíáò à ðεðóðá éŷ ïà εíε ï-ðá εòáéí éŷ ðáé ï ïεáçáá ðáíááíòεε εúí ðáçø εðŷááíá ïà ïááíá ïà ðáçáεòεŷ εáεòí ñ á úεáéíá ïà -áðáíóí, ðáεá ε ñ ðεðéíá, εáòí ñà áεεþ-ááò ε áðó áε áðóíε εéíóíε áúççε. Ðáçø εðáíεòá ñíáðáòεε (ñóá/óíòáεíε εíεáεòííεε ñ áíáñòíñç ε) ïáí εðáò ñáíáòí ïŷñ òí ïðε ïáñòðóèεáá í εéáòñ ïò ñεá ïñ-ð áεòáεáí εáðò εñí. Ì áá-á, ñíáðáòε ŷòá ïà Óáðòí áí çáíáç áá ñáíáòí ç íá-áíεá ï ðε áíε ïε á εéá òñ. Ìáðáñòááù éŷò áðíε ïà áíεíε ðà ñ éíεáéñ áááíñεðáε ñεáíñ-ðáεèòáéí εáðòεñí ñòááε εúñíá áεááñíñðεèá á ñòáá ïðε-εíεòá çá çááúðáéíá ïà áðíŷ ïà εçáúðø ááíεòá ñíáðáòεε ïà Ìáεéñ εεε Ó áðòíáí. Ñááí áíòáðíεòá ðáçáεòεε – ïà εíεñ ððáíñááð çóí ε ïá ñεá ïáòá – ñá ε çáúðø ááò áñá ñ- ðŷáéí – ïð ε áúççáñòí ε èεε ï áòáñòáè-íε áíεíε. Ááíεñ ñà ïáð áñòíáεε áíεíεò á ñ óáíáòáε ïε ïáð áñòáçε. Ìáíð ááúéúò á ááþááíóíáò á ðεíεíò áðáíεŷ áááá áúçí ïáñíñò ε ï ðε ðŷò áá ñá εçáú ðø áá ðáçáεòεñí á ðεðóðá éŷ, á ïð ε ñεáí ï-ðá εòáéí εòá áíεí ε áá εçáú ðø ááíá ε áíáñ òññç ε, εíáòí ç íá-εòáε ñí ñáíáðŷáá ε á-áñòáòáòá í á áεéáíò. Ðáçø εðŷááíá ðí ïà áúç ñáñíñò εòá çá εçáú ðø ááíá ïà ïεñé ε RRA áíáε áí ïáí áεŷááíá í á áðíŷ ïà ñòñíεðáíεòá, ñí ε óá áεε-ááá ñòáíòεáçá çá ññòñáðáòáéáí ñðáεáεòáò. Ìεá ðó ðεñíñ ïà εçáááεááíá ïð ïεñéíáε ïà ïðíò áεðεáíá ñòñíá, á ï ðááéí òíáá ñáíñ ïð ε òñéíáíáíε ñεó-àε ñ òíð ïεð áíá ïà áεñíεíááá εðíá εεε áúεáíòðáéíá ðεñòòεá, èεε ñúñ ñáíòε-íε òñéíáíáíεŷ. Ìò áðó áá ñòðáíá, ïðε ðáííε áñ-ðáεèòáéíε εáðòεñíε, εíεáεεçεð áíε á εéáááεòáòá (T1), ïðááñ-εòáíá εçáúðø ááíáòí ïà εíεáéí á áεñòεç éŷ ñ ññé ááááù à εú-á- ε ðεíεíò áðáíεŷ . Ðááíáñò ï ïòíñé ááŷááíá á ïò ç íá-áíεá á ðáçε ñεó-àε. Ìá ðáíε-á ïéŷò áðíε (òðε) ïá í ε áááá áúç ñáñíñò áá áε ññ ðááéí á ïò ááéíá ñòóáéŷ. Ëçáíáε: Ìεá ñááúðáéíá ðááεεáéíáòá ðεðóðáéŷ ïà εíεí-ðáεèòáéíεŷ ðáε – ðáçø εðáíá -ðááíá ðáçáεòεŷ ε εéíóíá áεñáéòεŷ. Óíáá áñíðéíáñŷ áí óááεε-áááíá ïà ïðáεéáŷáíñòðá. Ìðááñ-εòáíá εçñíεçááíáòí ïà ñòáíεáðε ïðε ïεñéε εáðòεñíε ïà ðáεèòíá.

## ÊÏÏÑÁ ÐÁÀÒÈÁÏÏ ËÁ×ÁÍÈÁ ÍÁÀ ÍÁÈÍÈΒ ÊÀÐÖÈÏÏ ×ÐÁÇ ËÏÁÈÍÈÐ ÁÏÏ ËÚ×Á-ÒÈÌ ÈÏÈÁ×Á ÍÈÁ

Ìεòáεéíá à È., Á. Ìúðá áñíáá, Á. Áεíεèòóíá , Ð. Èáçáðíá\*, A. Ááεáááííáá

*СБАЛ по Онкология, София, \*Токуда Болница, София*

**Цел:** Áíáεεç ïà εá-ááíεòá ðáç ðεðáðε è ðíεñε-ññ ò ïðε ááðéíεðεáíñ εú-á-ðεíεíεá-áíεá ïà áíáéíεŷ εáðòεñí. **Ματεριал и метод:** Çá ïáðéíáá ïò 2008 áí 2011 á. á εéεí εéáòá ñ È ú-áεá-áíεá ïà Ñ ÁÁËÏ ñà εáεòááíε 11 áíεíε ñ ïéíñéíεéáòú-áí εáðòεñí ïà áíó ñà ε áíáéíεŷ εáíáε. Ìò ðŷò 8 áεáíε è 3 ïúεá ïà áúççáñòíò 44 áí 76 ( ñðááíá áúççáñò 60 áíáε ïε) ñ εíεáéñí áááíñ εðáε è Ó3-Ó4 N-2 ðóíñð ε. Ìð ááε è ñεáá ïðíááááñòí ááðéíεðεáíñ εú-á-ðεíεíεá-áíεá ñà ïò-áðáíε: ðó ñðáí ñòááεε, áíáááεðáíá ïà ðáçíáεòá è εíááéíáéíε èèì óíε áúççε, ð áíáá óáíáòíεíáε-íá ε εíòáñòéíáéíá ðíεñε-ññò ñí CTC v.3.0. Ìðíááááñí á εú-áεá-áíεá çá ïáεáñòáòá ïà ïáεéŷŷ ðáç ε εíááéñóáíñðáéíεòá εéíò ïε áúççε áò ÓÓÁ 50Gy, ïðε ÁÏÁ 2Gy ïáð ïúðε ñááíε-ñí ïà áíáðáò εéíááí òñéíðεòáε è ðεíεíòáðáíεŷ ñ Óεñíεáðéíá 50mg áááíúε ñááíε-í í áí ïáú à áíçá 200- 250mg. Ñéáá ïεáíε ðáíá ïáòçá 40 áíε -ðáç ðáεòíñéíεŷ ε ðεñóíéíáε-íá ááðεðεéáòéŷ á ïò-εòáí áòáεòá ïò εá-áíεáòí. Ìðε ïáεε-εá ïà ïúεáí ðóíñðáí εíñðíé ïáεáñòáòá ïà ïúðáε-íéŷŷ ðó ñð ñá ñáðúóáíçεòá ñ 10Gy, èεε ïðε -áñòε-áí εíñðíé ñ ðááóεòéŷ ïà ðó ñðá ïáá 50% ñ14Gy áí ÏÏ Á 60-64Gy. Ìð ε ïáðñ εñòáíò éŷ ïà ðóíñð á ïáá 50% á εçáú ðø ááíñ ñíáðáò εáñí εá-áíεá - áñíòáòéŷ ïà ðáεèòíá 40 áíε ñεáá çááúð ø ááíá ïà εú-áεá-áíεáòí. **Резултати:** Ìðε ïðíñé ááŷááíá ïò 2 ï áñáòá áí 3 á ïáéíε á ïááé þááááí ïúε áí ðóíñðáí εíñð ïε ïð ε 63.6% (7 áíεí ε) è -áñòε-áí ïðε 36.4% ( 4 áíεíε). Ìðε áíεíεòá ñ ïúεáí ðóíñðáí ïóáíáíð á çáíáçáíá ñòéíεòáðíáòá ðóíéòéŷ, á ïðε ñòáíáéèòá áíεíε ñεáá ðááεεçεðáíε 60 Gy á ññéááááεá áñíòáòéŷ ïà ðáεèòíá. Õðε







# ΟΙΟΑ ΕΙΑ ΕΑΙΑΔ ΙΝΕΙΝ ΕΑ ΕΙΕ ΑΕΟΙΕΒ ΙΔ Ε 82 ΑΙΑΕΘ ΙΑ ΑΙΑ ΝΥΝ ΝΕΙΟΘ ΙΑΙ ΔΑΕ ΙΑ ΕΙΕ ΙΙΑ - ΑΕΑΙ ΙΔΑΑΙ ΟΑΟΕΒ

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Ιααα ποααααα 82α. ααα ιδε αοα Α ΟΕ ιδε ΑΙ Α-Ι ΑΑΕ-Ιε ιααα α ιε αηαη ηαδαο εαηι εα-αρεα η-ηαηα ια ηειοθηα ιε αοεηη ια οεαεηοδα οαηαοεα ε ειεηη ηεαηεααο ι.Ιδεαδοαααυε ααηεγ ααηεγ - οεηαδ οηεγ, ΕΑΝ. Charlson score – 8; WHO/Karnofsky-1/90-80%/; ASA-III.ΕΟ – ιγι α ααηε α -αοηηαοηαε ιαδαηοαε εεε οααεε-αηε ιαδαα ιδααεηε ε ιαδαεαααεηε εειοηε αυε ε. Οοηοηε ι αδεαδ ε - C EA-4,4;CA 19-9-4,11 .Εγ αυοθ αηα εαηαδ ηηεηηεα οηααεηα εηεαεοηι εγ. Νδααεδ αηα -αδεδ ε εαδθ εηηα ηTisN0M0G2, ηT1N0M0G2, ηT2N0M0G2, ηT3N0M0G2 . Οηεηαηα ηεα - ιαδοηαοεγ ια εαεοηο ια. Ααοηηεδαεεαοεγ ια 16-δε ααη.

# ΟΑΟΙΕ ×ΑΝΕ Ε ΑΝΙ ΑΕΟΕ ΙΑ Ε ΑΙΑΔΙ ΝΕΙ ΙΝΕ ΑΟΑΒΝΙ Α ΟΕΙΕΕ ΙΕΑΕΟ ΙΙΕΒ ΝΑΕΝΟΔΑΕΙΔΗΙΔ ΑΕΙΑ ΑΙΑ ΝΟΗΙΑ ΙΔΕ ΕΑΘΟΕΙΙ ΙΑ ΑΑΝΙΕΒ ΕΙΕΗ

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Οαηα. Ιεηεηαε-ιαδα εααυδαεαηηο ε ηεαοοηηοδα ιδε εαηαοηηεηηεαδα εηεαεοηεγ ηα εαδααηδε-ηη ηδαυδααηε. Οαεοα ια οηε ιαδαοεαε α αα ιδααηοααε οαοηε-αηεεοα ααδαεεε ια εαηαοηηεηηεα οα αγηηα οαηεηεαεοηεγ η αεηοδαεηοηο αεηα αηαηοηηα ιδε ιαοεαηοε η εαδοεηη ια ααηεγ εηεη. Ιαοηα. Ιαοεαη ουο εααε αοδοο ηαδαοεηη ιαδα α “supine position” η ιδεαδ αηα αγηηα δ υεα η αυ εαεηαο α ια ογεηο ι. Εγηεγ αηα οδε εεε -αοαδε οδηαεαδ ια οαοηεε α. Νυααααηα ια ηα αηηαδ εοηαοηο αη 12-14η η εαε α ια Vere ss. Ααεη 10η οδηαεαδ ιδαε εηεοη ηα αυ ααααα 30° ηο εεα ηα ηηο ααγ ια ηεαηοηο ι α ηυηα η ιααηα αεηεαδ ια εεηε γ α εγαη. Ααε ι 5-12η οδηαεαδ ηα ι ηηοααγ α η ηαη εγα εαααδαηο η ιααεηεααεεο εαδηα εεηεγ. 5η εεε 5-12η ο δηαεαδ ηα αυαααα η ηδααεηα εεηεγ ιαααο ηυηα ε ιααεη α.ηεαααα ηεοεηηεδαηα ια ηαδαοεη ηαδα ιαηα 30° Οδαηααεαηαο δα ε εγαηηοδαηε-ηη ηεηααη εα. Εαηαηοααη α ια αηε ηηοηο αοεη α η ηαη εηο αηαη ιο ααε. Ι ααεααη εηι ε αοαδαεαη ηαοηα α αεηαεοεγ η οαηαη ηυαηα εηηοηε α οο οεηη εαηααηαδα ιο ιαη οαοηεεα. Αηη-ααηα η ιααεηαεηα ιαδεοηηααεηα εηεεεγ α ιαεαηοδα ια εεαηεηε-ηεγ ηυαηα ηηη ια 1-2η ιο αηηεοα ιααηοαδεαεηε ηυαηαα η ηηεαααα υ ι εη ιοηαηαδεδαηα εεα εδαηα ε ιοαεηηααηα. Ηαεεεαοεγ ια οαδοηηαδεοηηαοηα η αεδεοεεαοεγ ια ααηαη ο οαοαδ ε αηηαηε ηυαηαα, αοη ααηοηο αη οαηοεγδα ια Told . Ιοηαηαδεδαηα ε εεαεδαηα ια ααηε εηεε-ηε ηυαηαα εεε ια ααηεγ εεηη α.εηε.ηαα. Νεααααυαοα ηοηηεα α ιοαεηηααηα ια ααηοηηεηε-ηεγ εεααηαηο η ι ιαεεεαοεγ ια οαηαοαεηα οεαεηο οα ε ιοααεγηα ια αδυαεεοα ιαααο εηεηα ε ααηαη εαδαδαεαη εαηαε. Ηηαηεηαηοα ηα αεηοδαοεδα ιαε-αηοη ιδαε οδαηηοαεεεεαεηα ιεηεε αηαδηοηι εγ. Ιαηαε υο ηα αυ αηοαηηαγαα -δαε „double stapler” οαοηεεα ε ε αδαδη-εαδαδαεηα εεαη-εηεε-η α αηαηοηηα α. Δαφεοαοε. Ι ο 2009α. αη ιαε 2011 α ΟΕ ια ΑΙΑ -ΙΑΑ Ε-Ι εηααεα ηα εααυοθ αηε 48 ααηεε οαηεηε αεοηηε ε η ηηαηα ια εαδ οεηη. 17(35%) ιο ογ ο ηα εααυοθ αηε εαηαοηηεηηεε. Νδααηαοη ηαδαοεαηι αδαηα α 100 ηεηο οε. Εηηααδηεγ ιδε 1 ιαοεαηο η-ηηαηα ια εηυδααηα. Αδοαε εηοδαηηαδαοεαηε οηεηαεηαηεγ ια ηα οααεηοδαεηαε. Ιαηαεαυο α αηυαηοαηηααη ηδααηι α οαηεεοα ια ααα αηε. Νδααηεγ αηεηε-αη ιοαηοηε α 4αηε. Νδααηεγ αδηε εαηεαααηε εειοηε αηυεε α 13αδ Αεεηη-αηεα. Εαηαοηηεηηεαδα αγηηα οα ιεεηεαεοηεγ α οααεεαεηα οεδοδαε-ια εηοδαααηεογ ιδε εαδοεηη ια ααηεγ εηεη. Δαηηοηο α υαηοαηηαγααηα ια -δααηαδα οο ηεοεγ ε η-εαδαοεγ αηεηε-αη ιοαηοηε ηα ιδααεηηοδαα ια οαε ιοηααοδα.

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## TREATMENT OF A RECTO-VESICAL AND A RECTO-VAGINAL FISTULA BY TEM: ONE YEAR EXPERIENCE OF THE CLINIC OF ENDOSCOPIC SURGERY OF MMA

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**AIM:** The aim of this research is to make a literary survey of the treatment of the recto-vesical and recto-vaginal fistula by TEM according to the world experience and our background and to express attractive clinical cases in one-year experience of the Clinic of Endoscopic surgery. **MATERIALS AND METHOD:** The recto-vesical and recto-vaginal fistula is a serious medical problem causing discomfort in the patients, disturbance of their sexual life, a difficult achieving of a sufficient hygiene and a mental illness. The treatment of the fistula is a long and difficult problem. The main reason of the recto-vesical fistula is the trauma during the delivery process, the surgery of the bladder, an injury of the rectum after a prostatectomy. The position of the patient on the table depends on the localization of the fistula according to the rectal circumference and the possibility of rotating the patient during the operation. It is obligatory to use antibiotics and to place a urinary catheter preoperatively and to precise how long they should be used. Several cases from our one-year experience of the treatment of the recto-vesical and recto-vaginal fistula by TEM are shown. A comparison between our and the world experience is made. **RESULTS:** Strict evidences are made upon the described research to show in which cases TEM is the right technique in the treatment of the recto-vesical and recto-vaginal fistula and the place of TEM among the other methods of treatment of this disease. **CONCLUSION:** TEM is a basic element in the diagnostic process and treatment of the recto-vesical and recto-vaginal fistula and is now taken for a golden standard, connected to a shorter hospital stay, a quicker recovery and better results. TEM ensures a better visualization and a possibility for a treatment of the fistula per rectum not including the cases of a neoplastic invasion of the rectum from a near-by organ or if the lesion is 20 cm from the anal edge.

## TEM IN THE DEPARTMENT OF ENDOSCOPIC SURGERY AT MMA - SOFIA 3 YEAR EXPERIENCE

Kotashev G.

The transanal endoscopic microsurgery (TEM), has been playing a significant role in the treatment of various low rectal lesions in the last two decades. At the beginning its indications were limited to the treatment of nonendoscopically resectable rectal polyps. As the technique developed, the spectrum of those indications broadened including more and more complex procedures, such as the treatment of early carcinomas and rectal ulcerations. An innovative surgical procedure, now TEM is used for full-thickness resections, partial excisions and fistula excisions. Nowadays TEM is acknowledged for being the founder of the Natural Orifice Transluminal Endoscopic Surgery (NOTES). **Methods:** With the current presentation we would like to share our 3-year of experience in utilizing the methods of TEM in the treatment of 60 patients. The cases include large-basis rectal polyps – 31; rectal fistulas - 6; palliative partial resections of advanced rectal tumors – 17; radical resections-2; correction of anastomotic strictures after low resections - 4. We must emphasize on the fact, that the cases have been assessed and selected very carefully. Where exploration of the abdominal cavity was needed, this was done by laparoscopy **Results:** All the patients have recovered relatively fast. The post-operative hospital stay was between 2 and 4 days. The method allows conservation of the patient's quality of life. There's a film included in the presentation

## LAPAROSKOPIC COLORECTAL RESECTIONS BY OVERWEIGHT AND MORBID OBESE PATIENTS

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**Background:** Recent studies have shown improved outcomes after laparoscopic colorectal resections (LCR) compared with open colorectal resections (OCR) for both benign and malignant colorectal diseases. The feasibility and safety of LCR for overweight or morbid obese patients has not been reported previously. **Aim:** This study was designed to evaluate the results of laparoscopic colorectal resections in normal weight patients compared with overweight and morbid obese patient. **Materials and methods:** We have prospectively analyzed two groups of patients undergo LCR in our clinic – patients with body mass index (BMI) higher than 25 (group A) and patients with BMI lower than 25 (group B). The both groups were with 36 patients, matched for gender, age, indication for surgery and type of procedure. All of the data were statistically analyzed. **Results:** The group A patients were significantly younger (54 vs. 61 years;  $p=0.04$ ), had higher American Society of Anesthesiology (ASA) scores ( $p=0.001$ ), and had diabetes mellitus ( $p=0.04$ ). The indications for surgery and the operations performed were similar. The two groups had similar operating times (177.9 vs. 136.4 min;  $p=0.12$ ), median lengths of hospital stay (4.5 vs. 4 days;  $p=0.2$ ), and returns of bowel function (4.2 vs. 3.9 days;  $p=0.45$ ). Group A had significantly longer incisions (6.9 vs. 5 cm;  $p=0.02$ ). Conversions (5 vs. 3 patients;  $p=0.7$ ), reoperations (5 vs. 3 patients;  $p=0.17$ ), wound infections (7 vs. 2 patients;  $p=0.14$ ), anastomotic leaks (3 vs. 2 patients;  $p=0.7$ ), and abdominal abscesses (3 vs. 2 patients;  $p=0.7$ ) were more predominant in group A, although the differences did not reach statistical significance. **Conclusions:** Patients with overweight or morbid obesity who underwent laparoscopic bowel resection had no significant differences in the rates of conversion, postoperative complications, or length of stay when comparing to patients with normal BMI. Therefore, the benefits of laparoscopic bowel resection should not be denied to overweight or obese patients based strictly on their BMI.

## COMPARATIVE EVALUATION OF FINANCIAL COST OF LAPAROSKOPIC AND OPEN COLORECTAL RESECTIONS

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**Background:** The financial impact of laparoscopic colorectal resections (LCR) remains poorly defined. There are a lot of publications in literature which demonstrate conflicting results. There is a perception, however, that laparoscopic colectomy is more costly than open colorectal resections (OCR). More of these publications assessed only the total hospital cost without rendering an account of long-term results and costs of treatment of late complications. **Aim:** The aim of this study was to compare the financial efficiency of laparoscopic versus open colorectal resections by using our data as well as using the data of publications. **Materials and methods:** A retrospective analysis of patients undergoing elective laparoscopic ( $n=124$ ) or open ( $n=108$ ) colon resections between January 2005 and December 2010 was performed. Primary endpoints were total hospital cost of the index admission, total operative cost and total hospital cost for any subsequent admission for treatment of a colectomy-related complication. The data were statistically analyzed. **Results:** Mean total hospital cost was significantly greater for patients undergoing OCR (6232 BGN per patient versus 4376 BGN,  $p=0.0003$ ). Mean total operative cost were equivalent in both groups (3275 BGN for OCR versus 3624 BGN for LCR,  $p=0.274$ ). Average length of stay was shorter for LCR (5.2 versus 6.9 days,  $p<0.0001$ ). Late complication rates were 5.6% (OCR) and 2.6% (LCR). Integrating the cost of late complications further increased the disparity between the total cost of OCR (3.4%) as compared with LCR (1.9%). **Conclusions:** The data of analysis shown greater financial effectiveness of laparoscopic colorectal resections in comparison with open colorectal resections.

ÂÚÂÄÆÄÄÍ Á ÍÀ ÑÈÑÒÄÌÀ ÇÀ ÓÑÊ ÎÐÄÍÎ ÂÚÇÑÒÄÍÎ ÂΒÄÄÍÄ  
ÑËÄÄÊÏËÎÐ ÄËÒÄËÏË ÎÄ ÐÄÒËË Ä ÊËËÏË×ÌÀ ÕÀ  
ÏÐÄ ÊÒËËÀ – ÏÛÐÄ ÏÌÀ×À ÊÏË ÐÄÇÓËÒÄË

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Âúââââíê ä:Ï ñâí ñúâðäí äíê ïð ïó÷ääíêý äíêáçäâð ï íêíæèð äêíäðä ðíêý íà ð äíñíðí çàððäíäâíä ï ðäç òððäðä, ðäíñäðä ñäêêêêèðêý, ðäñðððèðèêýðä íà ïäðäíðäðäêíäðä ðäðäíêý è äòäêèèäíñíðí ïäðèñ äðäðèäñ ïäççäíê ýäâíä ä êíê ïäêèð äêíäðä ðèðððäê ý. Êäòí òý êí ðäçê ñäðíäê ñà èç ääñðíê êäòí òñêíðäñ äúçñðäñíäýäâíä ñêää ñäðäðèêý (en hanced recovery after surgery, ERAS). Äñâ ïù ä ñúú äñðäðäâð ðäçêè÷êý ïä æäð ïäääêíêè ä ääòíðè ñ ïòíðø äíêä íà íä÷ äêíðí è í ä÷êíä íà ç äððäíäâíäð ï, ïäð êèðä çà äíðäâ ñ ññð ñäðäð êäíäðä ÷ðäâíä ïäðä çà, ðäççäêæäâí äòí íà ïäðè äíðèð ä, ïäççäíê ýäâíäðí è äð . Ñúú äñðäðäâ è ñðäââ êäíä äíç à ñêäíðè ðèçúí ñðäâ ðèðððä è÷íäðä ïäú ññð ñ ïò ñø äíêä ääçñíäñíñðð ä è äðäêè èäññðð ä íà ïðè êäââí äòí íà êñí ïêäêñ íà ñèñðäí à çà òñêíðäí ïòí äúçñðäñíäýäâíä ñêää ñäð äðèè çà êíê ïäêèð äêäí êäð ðèñí. Õäê: Ïðäíê à ääçñíäñí ïñððä è äò äêèèäíñ òðä íà áú ääæäâíäðí í à ñèñðäíäðä çà òñêí ðäñ äúçñðäñíäýäâíä ñêää êíêíðäêèðäêíê ñäðäðèè ä ñðäâíäíêä ñ òðäâêèèííêý ñäðíä êúí ññðñäðäðèäíêý ïäðèäí . Ïäðèäíðè è ïäðíäê: Ïðíó÷ääíäðí äêèð÷ä à 2 äððíê ïäðèäíðè, ñäðèð äíê ä ÊË êíêèäðä ï ï Õèðððäêý íà Ï Ë - Ï ÄÐ. Ïù ðäâðä äêè ð÷äâ 150 äíêíê ñ êíêíð äêèðäêäí êäððè ññ, ñä ðèð äíê çà ï äðèäâ Ñäíðäí äðè 2008 ä. – Ïäè 2011 ä ., êíêèðí ñ à ñèäââäêè êííäâíð êííäêäí ïðíðíê ïê çà ñèäâñäð äðèäñ äúçñðäñíäýäâíä – ðäñðððèèêý ïä ï ðèäí íà òä÷ññð è è ððäí à äí ïäêè÷è ä ä íà òêäððñ, ïäðäíðäðäêñí ñèðèèäâíä íà ä ïäñí-äêäêèððíêèðè, äíäðäêíê è ääèð ú÷êè ïóæäè, ñ ñðäêäí ðäæè ïùðäêèðä 3-4 äíê, çäâúêæèð äêíê ïðíðèèäèðè÷è äðäíäæè äí 7-10 äâí è äí ïäêè÷èä íà ääðäêèðð èý, ïð ïðèèäè ðè÷ñí ññ ðäâýíä íà í äçñíäñððäêíä ññíäâ è äð . Äòíð äòä äððíä ñâ ñúñðíêè ïò 10 ïäðèäíðè, ñäðèðäíê çà ïäðèäâ Ñíðäðè – Ïäè 2011 ä. 1 ä. è ñèäââäêè ïðíðíêíêè çà òñêíðäñ äúçñðäñíäýäâíä ñêää ñäðäð èýðä, äêè ð÷äâú ïðèäí íà òä÷ññð è è ðäí ñí äíðäð äêñí çàððäíäâíä ä ïùðäêèðä 24 ÷., ðäñí ðäççäêæäâíä, ïäççñíêçäâíä íà ïðíðèèäèðè÷èä ïäçñíäðððäêíä ññíäâ, ðäñí ñäâêýíä íà ó ðäððäêíêý êäðäððð è äð äíäæèðä, ïðèäí íà ñèíäêíðèè, ðäñðððèèêý ïä ïäðäíðäðäêíäðä òäðäíêý, ñðèíðèèèêý ïä ÷ðäâíêý ñðèèèðäð, êñíêäêññí ñèäâñíäðäðèäñ íà äççäíêýäâíä. Äíêèðäíðèðäíê ñà êèêíê÷èðä, êèêíê÷ñí-êäâíðäðððèðèðä è ïäðäçñíäêäâññððè÷è ääíê çà ñúñðíêíêèððí íà ïäðèäíðèðä ä ññ òññäðäðèäíêý ïäðèäí, êäêèð è ñð ääèðèäíêèðä ïòññðäíêä, äíêíêäê òñäúäíêý è ÷ðä ñðäâ íà ïäðèäíðèðä, ó ñðäñíäâíêñ äíêäðíä êä ððä. Ðäççèðäðè è ïäññúæäâíä: Ïä ñâ òñðäñíäýäâð ïäâ äðèäíê äð äêèð ïð è ïðè êäââí äòí íà ïð ïðíêíêä çà òñêíðäñ äúç ñðäñíäýäâíä. Äñê÷è ïäðèäíðè è ñèäââäêè ïðíð ïêíêä äíäð ä ðíêäð èðäð ðäññíðí äíð äðäêñí ððäíäí ä è ðäç ääèæäâíä, äúðçí ïðäíäíê ýäâð ÷ðäâíäðä ïäð äçà, ñðäâêèðèäñ ñâ ÷ðäñðäâð ñ-äíäðä ä ñðäâíäíêä ñ ïäðèäíðè òä ððäðèðäíê ñ êííäâíðèíäíêý ññð ïä. Ääñíêèðä ïð êèðäððäðððäðä äíêä çäâð, ÷ä ïðèíêäíêèððí ïä ñèñðäíäðä íà òñêíðäñ äúçñðäñíäýäâíä ñêää ñäð äðèêý äíäê äí ïäí äèýäâíä í à ÷ñðððäðä íà ñèäâñí äðäðè äíêèðä òñêíäíêíêý, ðäâððèðä ïäðäâíêèðèêý ñððäñ, ïäíäêýäâ äíêè÷èêý ïðäñðíê, êäòí òýêí ñâí äðýäâ ñäñí÷ðäñðäêèðä í ïä ïäðèäí ðèðä è ññíäâ à çà äúðçíðí äúçñðäñíäýäâíä è äð ùú äíä êúí ñððí äèíêý èí ïä÷è ïä æèäíð. Çäêèð÷äíêä: Êñíêäêñíêèðä ïäðíäê çà òñêíðäñ ä úçñðäñíäýäâíä ñèäâ êíêíðäêèðäêíê ñäðäðèè ñà ääçñíäíê, ñèä çäâð äíäðè êèêíê÷èêè ðäççèðäðè è ñà êäññí ïðèíêæèè ä êèêíê÷èðäðä ïðäèðèèä.

# ΕΧΑΙΘ ΙΑ ΕΑΧΑΙΑ ΝΟΘΑΟΑΕΒ ΙΘ Ε ΑΕΕΙΑΑ ΔΙΕ ΧΑΘΙΑ ΔΙΑΙΕ ΙΑ ΟΑΝΟΑΕΙΟ ΕΙΕΙΘΑ ΕΟΑΕΑΙ ΕΑΘΟΕΙΙ

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Οάε: Οάεοα ία ίθίο-άαίαοί ά ίοαίεα ία άύ ϑίηε ίηθόεο ά ϑα εί αεάεαοαεεε ϑαίά ία ί οεθόηάε ίαθά οαθάρεϋ ίθό άίείε η άεείααοίε ράδιηάοίάίε ίαοαηοαε ίο είείθάεοαεάί εαθόεήη (ΕΔΕ) . Ιαοάθεαε ε ίαοίά ε: Ι άάεο ία ίθ ίο-άαίαοί ηά 42 άίείε η άεείααο ίε ίαο αηοαε ίο ΕΔΕ, ίο ίαύ ί 108 ίαοεάίθ ά, ίθό είεοί ά εϑάύθθ άίά ράδιηάοίάίά ϑάϑαεοεϋ (× Β). Εεά αοοθά/άίάίεεϑαεϋ ία άαηίεϋ εείί ία v.portae ά εϑάύθθ άίά ίθό 9,5% ίο άίείεοα, άαο άοαίά οάίαοάεοηεϋ ίθό 4,9%, ά εηίάείάοεϋθά ίο ×Β η οάοί ίαάεαοεϋ ά 7,1% ίο ηεο-αεοά. Ιάίααηάοί ία οείείθ άθάρεϋ η οάε ϑα ίηθόεά άίά ία „down sizing” ά ίθόεε ίαάίά ίθό ε 59,5% ίο άίείε οά. Αο άεúο ίο ίάίααηάοί άοά ΟΟ ά ίοαίά ηύ ίαθϑ ίη Response Evaluation Criteria in Solid Tumors ίθό εαθό ίο Αάδιηάε ηεαοά ίθό άαίεϑ αοεϋ ϑα ί θίο-άαίά ε εά ράεα ία θ άεά (EORTC). Άίείε οά ηά ίθ ίηεάαίε ϑα ίαθ είά ίο 1 άί 3 ά ίάείε. Δάϑοεοαοε: Ιόεοε θίεαεί ίηθόα ία × Ι ά ηθάάάε ϋθ ϑα ίθ άεεάϋάί ίηθόα θ άεοίθ (θ<0.05). Ιθό ε οίεείααοί ί ϑαϑί θίηθθ άίάίεά ηθάαίαοά ίθάε εάϋάηηθό ά 32 ίαηάο ά, εαοί θθ ε άίάεί ε ίθάε εάϋάαο 50,7% ίο άίείε οά. Ιθό ε αεείααο ίε ίαοαηο αεε ηθ άαίαοά ίθ άεεάϋάί ίηθό ά η- εθάοε ά ε ίά ίαάάεο άάά 19 ίαηάοά, εαοί θθ ε άίάεί ε ίθάε εάϋάαο ηάί ί 31,2% ίο άίείε οά. Εϑάίε: Αάί ίάίάεθ ίεοά ϑάϑοεοαοε, εαηάαú ε ίθάε εάϋάηηθό οά ηά ηύεϑίάθ είε η άαί ίεοά ίθ εεοάθ αοοθάοα, η ίθό ε άυεάηηθί-ηί ί θίηε άάϋάάίά οηοάηάϋάάί ά ϑάϑεεά, είϋοί ίά ά ά ίαθά ηεϑα. Η-ίεηεαοά ίθάεεάϋάηηθό, είϋοί θάαεηθόεθ άίά ηά άυεάε ία εηίεάεη ίο ίάάεοεάίε θαεοίθε, εαηάαúε ηηηάη ίοεοείηάείεϋ η άοίά ϑα εά-άίεά. Ηηηάίε ίθε-είε ϑα ϑαε ϑάϑεεεά ηηθάά ίαη ηά ίάάηηθόαú-ηί ίθάοεϑίάοά ηάεάεοεϋ ία ίαοεάίθεοά, ηά οίάϋυε ϑα ×Β, εείηά ία είάεάεαο αεάί ηάοίά εúί οείείθάοάίάάοε-ίαοά ε οά θάάοίά οαθάρεϋ ε ίοηύηθόεά ά εά-άαίαοά ηθθάοάαεϋ ία ηύάθάί άίίε ίαθίάε ϑα εά-άίεά, εαοί θάαείείθίοθάοαεϋθά.

# ΔΙΕΒ ΙΑ ΧΙΑ ΑΘ ΕΕΒ ΠΕΕΠ ΑΙ ΑΕΘΟΝ JC Α ΗΕΙΑΑ ΙΑϑΑ ΟΑΙΑ ΕΙΕΙΘ ΑΕΟΑΕΙΕΒ ΕΑΘΟΕΙΙ

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Αεθόηάοά ίίε ίαάίά ϑα ά άίεαϑ άίά ίθό ίϋείε άεάίάα θ άε, ίαίθ . θάεúο θ ία ίαο ί-ίαοά θ εεεά ηά ηάηϑάά η είθάεοεϋ η ράαοεεϋ ίάίεεηάί άεθόη, ίύθάε-ίεϋ ράδιηάοίάάί εαθόεήη - η οάίαοεθ Β άεθόηά , εείθίη ά ία Bur kitt – η άεθόηά ία Ep stein-Barr. Α ηηεάάίεοά άίάείε ηά ϑ αηεεε είθάθάηú θ ία ηίηάί εϑηεάάίάαοάεε εúί άύ ϑίηε ηθόί άεθ οηίί ο-αηθόεά ε ά είείθ άεοαεί άοά εαθθ είηάά ίαϑα. Ι αεεοά ηά ίύθάηά-άείε άαίίε ϑα άύϑίηεάίά άθύϑεά ίάεαο είθάεοεϋθά η ράαοεεϋ ηεεηάί άεθόη JC (JCV) ε ϑαϑαε οεάοί ί ά είείθ άεοαεάί εαθθ εήη. Οάε ία ίθ άαηθάάάηθό ί ίθίο-άαίά ά άά ηά ί θάαηθάάϋθό ε ίαηύά ϋθ ίάεε-ίεοά εεοάθάοθόοίε άαίίε, εαεοί ε ηία ηθάάίε ϑάϑοεοαοε ϑα θίεϋθά ία JCV ά ίαοίάάίάϑαοά ία θάεα ία άάάάείθί ε ίθάάίθ ί ράθάί. Ι άίθάάάί ά ίθάά εάά ία ίοάεεε οάάίεοά ϑάϑοεοαοε ία θ αϑεε-ίεοά εϑηεάάίάαοάεηεε άθοίε. Ηίάηθάάίεοά ίθίο ράάίεϋ άεεη-άαο εϑηεάάάάίά ία ίθίάε ίθ 40 ίαοεάίθε η οεηοίείάε-ηί άίεαϑάί είείθάεοαεάί εαθόεήη, ηάθεθάίε ά Εεείεεαοά η Ο εθθθάεϋ ία ΙΕ – ΙΑΔ. Ιαοάθ εαεεθ ά ηά ράηθόε ίθ οοίθθίά οú εάί ε ίθ ηθ ίάείά άάάάεί-θ άάίά ηοάίά, εαεοί ε ίθ άάάηάο ίϑίε ηεείε, αεί ηά ίάεε-ίε ά ϑάϑαεοεάίεϋ ίθάίάθάο. Οúθηάίε ηά άεθόηίε ΑΙΕ ηηεάάίάαοάεήηθόε, εϑηεϑάεεε ηοάίάαθθεϑεθάίά ίαοίάεεά ϑα ΑΙΕ άεηθθάεοεϋ ε ηεείάθϑαηάαθεεάίά θάάεοεϋ η ίθάείάθε ϑα άεθόηίεϋ Ο-άίεοαί ε ίάείάεθάυ εϋ εηθθθίεάί θάάεήη. JCV ίθείάάεάεε εúί ηάί. Polyomaviridae. Εϑίεεθ άί ά ίθά ϑ 1971 ά. ίθό ηϑ υέα ία ίαο εάίθ, ηθθάάάυ ίθ ίθίά θάηεάί ά ίοεοεθ ίεάείά



eaaefiaioaofiaodey. Aua adeo nrey aaimi a efieoai O-aiodeaia, efioi na n-eoa, +a eia iae-afeyia  
 oiea a ifeiaiafaca. Aefieoaa eafieoafiaifino ia JCV a afieacai ia dacee-ife ifioie aeafioie. Eia  
 afieacadoafnoaa ca idenufoaea ia JCV aaimi a iae-dac ee-ife +iaao ee eeaode. N-eoa na, +a  
 aaaaefi-d afaiaa iofic a a auai iaeai dafadafad ia oic e adeon. O aeaei- idaei ey iaafai ecui a aeai io  
 infaieoa ca dafayaaia n JCV, a efioaeoyoa iaeefiaai iaonenoeda nacefiai. JCV a iodeeai a  
 ooiode n i dteq oia io iad afaaa oueai: aeefiaefi onie, anodto eonie, aiafaei nie, i aaoefiaefi onie e e  
 ad., eaeoi e a noiaaie e efieoafie ead oemie. Nuu anoaooa idio-aa iey neacaaue  
 acaei iaefnoaea oi ia O- aiodea aia n ooiode onafioie y aai p 53, n aai Rab51 e ad. e iafai aifio efay ca  
 aiafodeaia ia aiaade-ia iafoaaefino a eeaodea, nuuudaeu e JCV. Nuu anoaooa e adoe iaofieie  
 - o-anodea ia aed onie aaeouo e, efioi ie acaao aeeyiea ia o oioiaoa i eefio aae e infaio aao  
 dafaeoaeoi e ifieoafiaoyoa ia ooiodea eeaode; efioaa daoy ia adeonia oa AIE a ifiaaeae  
 o-anouo n oia. „i i-ed aoea” nooeooda, n efioi na i adoo aai aai aao daaeoey e ad. Iae- aafiyoi i  
 JCV o-anoa n dacee-ife ia-eie a efieoafieia ia ifeiaiafaca - aedeoi e efieoafie.  
 Iifaaeyiaoi ia ofieaeai e ifioafai iaofa iefui, n efioi adeonuo aeefnoaa ia a a ucfiaei. Iyete io  
 aofeodea na oafieoioie e aeeyyo ia ooiioiaoa ifiaafay a ifiaaeae adae. Iao eoa dafceode  
 neacaa iae-e a ia JCV a 12 iaeafio e (30%). I de 10 io o yo na iode eaeie aed onie AIE  
 ifeafiaa aeefno e a ooiioiaoa a oueai. Ide ifoiaae oa 2-i a ifeo eafai dafceoda a onofiaa i a  
 ifiaoa io ifoi aeia eeaade a ide aa efey e a i ofiaoa io aaimia icai i efie io e adoe ay aie ai ide  
 iaafaeafai dafceoda ca ooiioiaoa oueai. Ide 5 iaeafioe na iaafae e aaimiaofie ifeie a  
 dafceoda aao +ano io aafaeio + adai, ead i 4 io na onofiaae JC V ife aiafadaei ife. I de aeai io  
 iafaeioeoa a onofiaafai iae-e-ead i JC adeonia -anode na n a ife, a ide afaia a o noafiaafai  
 iae-e e ad i e a ifoi aeiaoa eeaade a. Iac aaeefi io afia iey adie idio-aaiey, ana iu a ofe yoa ia  
 JCV a efieo aeoaefi aad ifeia aiafa na iofeaa io ec ynyafia. I oaei a n aafni idai ia- ei aa n a ifeae,  
 +a efio eoyoa n JCV aaeai o efiea oae oio ca ifyaa ia efie idaeo aeai ead oemie. Iafiofaei i a aa na  
 onuafioafioaao e noiaafioeodea i adiaea ca aafaeoy ia JCV a ooiioie e ifioefieoa oueai.  
 Aaeai auioin a aeie idenufoaeoi ia JCV a dacee-ife a ooiode a dacee-ai noaeae, a ifeafioafieo  
 eafce e a nuafieoafio ifiaefie, ifiofaiae oueai. A ooa afaeo a aa na caafaei-a o idio-aaiey oa ia  
 efioiey ioa ifio efui JCV, efioi a au aau a u a nifia ia ca dafdaafioaia ia no daafae ca adaeoey  
 ia adeonia io +iaao ead ifioeoy .

## NĖIÄÐ ÏĖ İÄ İÄ ÐÄÄİĖŅ ÄĖİÄ ĖİÒÐ ÀĖÖĒB İÄ İÓÁİÐÁ ĖÒÀĖİĒB İ ÓŅĖÓĖ

### İ. Ðoñaá, Í. Ááçáá

*Хирургична клиника, ВМА – МБАЛ Пловдив, България*

Ide-efieoa ca efioefiaoye e noiafaea aafaeoeyoa na iodeoafioioie, e ecyaeoa na dacee-ife.  
 Adeefiae-n efioefiaoye e iafio o afaaa aafaeoey ifaa aa na dafaeeyo ia aafaeio adote -  
 aafai oafce e ifio oeyo ia ifai afae ai eafae (Pelvi outlet obstruction – POB). DİÄ ae ep-aa  
 adefiae-ife aaeieoe ead ifadafiefaei efie idaeoye ia ioa idaeoaeai ioneo e (anismus) daeaeai  
 ifeafni e iafceiafaa i na dafiofae. Ide ifiafae aafaeoey ioneo eoa ia dafiaioi auie e  
 auio ieyo afae ai naefeo ad aie aai na ifiofae, e iafai afae ai iaf ad anoaia ia ai idaeo aeieyo uafie  
 nifaeoa aia ia efioafaeefioia efiafa. Iafaeioeoa n ifadafiefaei efioaeoye ia  
 ioafioaeoae eefi na i anifiaie aie aai aa ifiofiaoa ioneoaeoada i a dafiaio i auie. Efa ad  
 iaafaeafioa efie idaeoye ia ioa idaeoaeen (eefina ia daefnaoye) a ia eoa nuiofyefioi na iafde-a  
 afcei on. Ca dafceea io eafioafie aie nefio ifa io e afce iona ifyia aie ea. Eafioafie aie ne ifio na  
 ecf acyaa a onao q ouia aie ea eee ae nefio ifioi i afioae aiea aefie i a daeo oia. Iafaei oea i faad aa  
 eiaa onafiaa, +a na nafaiee aufo oifea ee e, +a ei ad -ofaei oyefi a o aeoia. Afie ead ife a aa na  
 onefaa ide auia nafaae e ee aafaeoey e na onafia a if-afio a eyai. A ifac afioaeoye na ifaae dafia  
 ifiae aia e na i daafioay nef-ae ia iaf aafiefae efioae oey ia ioafiae daefn nuñ caai i daeo ifae  
 afaeai n aafaeiaoye e onafioi oafceoi n ifni-afa daefnaoye.



## PREREQUISITES FOR MISCALCULATIONS BY RADICALISM OF THE DISTAL RECTAL CANCER

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The total mesorectal excision (TME) is a “gold standard” for DRC surgery. The pathologist evaluates the TME and he is the referent for the surgeon’s work. The number of the pararectal RLN determinates the accuracy of TME and they must be at least 12 to be considered a complete excision. The R0 resection has a histological clearance for the distal resection line, for the circumferential border and TME. The criteria for the distal resection line are clear and there are no prerequisites for errors, but incorrect estimates for the TME and for the circumferential clearance are common. Often the pathologist has found less than 12 RLN, despite of the fact that the surgeon insists for a complete TME. The situation allows some reservations about the accuracy of the operating team. It is known that after a neoadjuvant therapy the RLN in the specimens of the DRC are reduced. When the mesorectal excision is incomplete the pathologist can find a circumferential cancer clearance, but it is possible for some cancer structures or metastatic RLN to remain in the minor pelvis. So the resection is R2 regardless of the histological proved circumferential clearance. The assessment of the pathologist for the completeness of the TME and for the presence of the circumferential clearance is difficult. The discussion, whether the excision is extrafascial or is with a transmesorectal plan of dissection and compromising oncological principles, is justified. A specimen oriented surgical technique, in our opinion, is the best way to support the operator’s pretending for complete TME. The technique achieves a similar macroscopic view for the DRC specimens even from different surgeons. The integrity of the own rectal fascia, which is attached to the rectal specimen confirms the extrafascial plan of dissection. Not cutting entire specimen is the condition for the pathologist to obtain clarity about the TME integrity. The exact macroscopic description, especially for the rectal fascia has priority for the evaluation of the TME more than the number of RLN. So it is possible to identify the potential lacks of the mesorectal tissues. The transversal cuttings of the extraperitoneal part of the specimen with 1 cm thickness are for evaluation of the circumferential clearance. The circumferential border adjacent to the tumor or to the metastatic RLN is necessary to check histology to confirm the R0 resection.

**Key words:** total mesorectal excision (TME) distal rectal cancer (DRC) regional lymph nodes (RLN)

## INDICATIONS FOR HARTMANN’S RESECTIONS FOR ADVANCED DISTAL RECTAL CANCERS

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**SUMMARY:** ADRC involves the adjacent structures and systems in the minor pelvis and the achievement of radical R0 resection is technically challenging. The main problem is to obtain the circumferential clearance and it could require resections of the ureters or the bladder. The restoration of the urinary tract integrity is obligatory, but if the gut passage is restored too, the complications are common. An additional indication for a two-stage operation like Hartman’s procedure is the high rate of LR for ADRC. **MATERIAL:** 14 ADRC with T4 lesions are treated with radical Hartmann’s procedures. Five interventions were combined with single ureter’s resections, one was with both ureters resection and their implantation in the bladder and eight were with posterio minor pelvis evisceration. **RESULTS:** The postoperative complications as urine leakage from the drains in the pelvis were found in three cases. They were treated successfully with an active aspiration through the urethral catheter for 10-15 days. The all posterior minor pelvis evisceration have taken place without complications, but after three of them LR were developed. The one was founded after a year and another - two years from the restitution of the gut’s tract. There was one LR after interventions with ureter’s re-

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section. No operative mortality was registered. **CONCLUSION:** The Hartmann's procedures are indicated for some ADRC when the radicalism allows preservation of the levator muscles and sphincters. An en bloc resection for circumferential clearance, when includes parts of the urinary system, requires a restoration of their integrity. The simultaneous gut restitution increases the risk for complications. The high LR rate by ADRC and the adjuvant radiotherapy are also an indication for a Hartmann's procedure. The reasonable term for the gut passage restitution is at the end of the first year of the operation, because most of the LR are developed in this period.

**Key words:** advanced distal rectal cancer (ADRC) sphincter preserving operations (SPO), local recurrence (LR)

## **SELECTION OF DIRECT OR RECONSTRUCTIVE ANASTOMOSES FOR DIFFERENT TYPES OF SPHINCTER PRESERVING OPERATIONS**

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**INTRODUCTION:** The limited distal invasion for an extraperitoneal DRC is a prerequisite for the SPO increasing. The expressed ARS is typical for more of the distal SPO, especially when they are combined with an adjuvant radiotherapy. **OBJECTIVE:** A retrospective analysis to determine the indications for direct or for reconstructive anastomoses about the different kinds of SPO on the basis of the functional effects and the complications. **MATERIAL:** 162 SPO have been implemented for a DRC. The low and the ultra-low anterior resection were 60, the proctectomies – 80 and the intrasphincteric resections - 22. The direct anastomoses have been 78 SPO and the other 84 have been reconstructive ones - 50 latero-terminal anastomoses, 9 operations with a coloplasty and 25 j pouches. **RESULTS:** Clinically significant insufficiency were found after nine total proctectomies with direct anastomoses and without protective ileostomas Expressed ARS was observed mainly after direct coloanal anastomoses by patients over 65 years. The syndrome is minimal when the j pouches were applied. **CONCLUSION:** The amount of a distal resection of the proctium, the adjuvant therapy, the age and some morbid conditions determine the need for reconstructive anastomoses to prevent the ARS.

**Key words:** distal rectal cancer (DRC) sphincter preserving operations (SPO) anterior resection syndrome (ARS)

## INTERSPHINCTERIC RESECTION FOR LOW RECTAL ADENOCARCINOMA IN PRESENCE OF COMBINED TREATMENT PROGRAM

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Indication for intersphincteric resection (ISR) is non-fixed (T1, T2) low rectal tumor located within dentate line. Implementing of polyradiomodification program allows broadening indication for ISR to a advanced stage (T3, T4) of low rectal cancer. Aim: The aim of this study was to analyze oncological outcome after intersphincteric resection (ISR) for very low rectal adenocarcinoma in presence of polyradiomodification program. Patients and Methods: 36 patients with low rectal adenocarcinoma entered the trial. All patients had an infiltrating adenocarcinoma, located between 2.5 and 4,5 cm (mean. 3,6) cm from the anal verge. 16 of them (44%) had invasion of internal sphincter as determined by endosonography or MRI. Preoperative radiation therapy (RT) given in single fraction 4 Gy to a total dose 40 Gy. We use 2 radiomodifier – local Hyperthermia (HT) which add tumoricidal effects and electrone-accepting substance METRONIDAZOLE (MZ), which together with HT reinforce tumor radiosensitivity. HT (superhigh frequency, 460 MHz, exposure 60 min, temperature 43,5-44<sup>0</sup>C), given before irradiation. MZ (10 gr/m<sup>2</sup>) in a form of hydrogel administrate intrarectally, exposure 5 hrs. We use modified XELOX chemotherapy scheme: Capecitabine in daily dose of 2000 mg/m<sup>2</sup> + Oxaliplatin 50 mg/m<sup>2</sup> once a week. Results: All patients received preoperative RT by abovementioned program and ISR with curative intention. No one has local recurrence or distant metastases – 2 years of observation. Conclusion: Intersphincteric resection in presence of polyradiomodification program appears to be oncologically adequate for very low-lying rectal tumours. This optimistic results evidence competence of sphincter-saving treatment for ultra low rectal cancer.

## SHORT-COURSE NEOADJUVANT CHEMO-THERMO-RADIOTHERAPY FOR DISTAL RECTAL CANCER

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Background: Despite of wide use of preoperative radiotherapy (RT) long-term results for distal rectal cancer and specially low-third still poor. It shows that for low rectal cancer radiation dose of short-course RT may be insufficient. One possibility to reinforce efficacy of RT is use of radiomodifiers. This allows realize main radio-biology effects as radio-sensitization, chemo-sensitization and synergy of both. Materials and methods: A total of 89 with “poor” stage (Duke B,?) according endosonography, nonrandomized patients with tumor location 2/14 days and 25 Gy of radiotherapy (RT) (5x5). With the aim to increase efficacy of RT we add local hyperthermia (HT) - exposure 60 min, temperature 43,5-44<sup>0</sup>C, given just before irradiation on days 3,4 and 5 of RT. And as a radiomodifier we also use metronidazol (MZ) (10gr/m<sup>2</sup>) in a form of hydrogel, intrarectally on days 3 and 5 of RT. Combined use of HT, MZ and capecitabine allows achieving radio-sensitization, chemo-sensitization effects and synergy of both effects. We compared results of that multimodal approach with group of distal rectal cancer patients who receive preoperative short-course RT only. Results: The rate of sphincter-sparing resection was 80% for low-third rectal cancer, 89% for middle-rectal in chemoradiation group and 66% and 77% respectively in RT group. The acute toxicity profile was compara-

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ble, with little Grade 3 and no Grade 4 toxicity. 5-year local recurrence-free survival rate and the 5-disease-free survival rate was 96% and 92% in chemo-radiotherapy group and 82% and 66% in RT group. Conclusion: The addition of local HT and MZ increase local control and including of capecitabine (Xeloda®) in this multimodal approach significantly increase disease-free survival by decreasing distant metastases rate. This approach needs future randomized investigations and appears to be oncologically adequate and broaden indications for sphincter-saving surgery.

## **ELECTRIC STIMULATION OF ANAL SPHINCTER AS A TREATMENT OPTION FOR FECAL INCONTINENCE AFTER ULTRA-LOW COLOANAL ANASTOMOSIS WITH OR WITHOUT INTERSPHINCTERIC RESECTION**

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**Background:** Progress in combined treatment makes possible sphincter saving treatment for patients with low rectal tumor. Many clinics report about good oncological outcome. But functional results after ultra low coloanal anastomosis (CAA) with or without intersphincteric resection (ISR) sometimes disappointing. The purpose of this study was to prospectively investigate patients with fecal incontinence after ultra low CAA with or without ISR and evaluate the efficacy of electrostimulation (ES) as a treatment option. **Patients and Methods:** 36 patients were treated for fecal incontinence. All patients had low rectal cancer and received pre-operative chemoradiotherapy following by proctectomy with or without ISR with hand-sewn CAA. For electrostimulation we use Neurotrac ETS device in “incontinence” mode. **Technics:** bipolar probe introduced into anus. Each session lasts 20 minutes. Usually started with 20-30 mA to maximal amplitude up to 80 mA. Total number of sessions was 10. Patients were not specifically selected for treatment. Success was evaluated by anometry, water infusion test, Wexner scale. **Results:** Mean squeeze pressure increased significantly after stimulation from 1,52 to 2,4. Mean score by Wexner scale improve from 16,6 to 8,3. Mean index according Wexner scale for hard and liquid stool and flatus incontinence improve from “2,96”, “3,59” and “3,44” to “1,14”, “1,92” and “1,55” respectively. Naturally, group without ISR showed better results. **Conclusion:** Preliminary results for ES have shown that patients achieved higher maximum voluntary squeeze pressures, and showed a marked improvement in their continence. Given the advantage of ambulatory use the ES seems promising in terms of achieving improved fecal continence in selected patients.

## **MODERN APPROACH TO TREATMENT OF METASTATIC RECTAL CANCER**

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**Background:** Addition of pelvic radiotherapy to systemic chemotherapy may improve treatment results for rectal cancer patients with synchronous resectable distant metastases. The aim of this study is to investigate the role of neoadjuvant chemoradiotherapy in this clinical setting. **Materials and Methods:** 27 patients underwent new treatment method between January 2007 and December 2010. 11 (40,1%) patients had single lobe liver metastases, 8 (29,6%) had metastases in both liver lobes, 6 (22,2%) patients had lung metastases, 2 (7,4%) patients had metastases in ovaries and 2 (7,4%) had metastases both in liver and lungs. All patients were divided in 2 subgroups depending on resectability of primary tumor. 19 (70,4%) were included in group

A (primary resectable -T<sub>2-3</sub>N<sub>x</sub>M<sub>1</sub>) and had neoadjuvant 5x5 Gy radiotherapy with local hyperthermia on days 3-5 and application of metronidazole 10 g/m<sup>2</sup> per rectum on days 3,5. 10 (37,1%) were included in group B (local advanced - T<sub>4</sub>N<sub>x</sub>M<sub>1</sub>) and had hypofractionated radiotherapy with total dose of 40 Gy in 10 fractions by 4 Gy, local hyperthermia on days 8, 12, 15, 17 and application of metronidazole 10 g/m<sup>2</sup> per rectum on days 12 and 17. All patients received chemotherapy (FOLFOX 6 or XELOX) first course started on day 1 of radiotherapy following 2-3 courses prior to surgical treatment. Results: No critical toxicity requiring treatment cancellation was observed. All patients underwent surgical treatment. 9 (33,3%) patients had R0 surgery. Sphincter-sparing surgery was carried out in 16 (59,2%) patients, APR – in 8 (29,6%) patients. 1 (3,7%) patient had palliative colostomy. Median follow-up was 11 months. 3 (11,1%) patients had disease progression, 1 (3,7%) patients died. We study pathology response in primary tumor and metastases after treatment. Pathological response rates were as follows: in primary tumor: near complete pathologic response – 37,1%, partial – 48,1%; in metastases: complete pathologic response – 33,3%, near complete – 44,4%. Conclusion: Investigated neoadjuvant chemoradiation scheme for rectal cancer patients with synchronous resectable distant metastases has a acceptable toxicity and provides necessary local control to justify sphincter-preserving surgery for this patients group.