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საქართველოს სამედიცინო სიახლენი

Содержание:

LAPAROSCOPIC LATERAL PANCREATOJEJUNOANASTOMOSIS IN TREATMENT OF CHRONIC PANCREATITIS: REPORTING THE FIRST EXPIRIENCE IN UKRAINE

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Chronic pancreatitis (CP) is a disease of the pancreas in which recurrent inflammatory episodes result in replacement of the pancreatic parenchyma by fibrous connective tissue. This fibrotic reorganisation of the pancreas leads to progressive exocrine and endocrine pancreatic insufficiency [1]. Patients with End Stage CP typically struggle with pain relief, stigmatization, unemployment, and depression and often have among the worst quality of life measures for any chronic disease [2]. Progression of CP an increased risk of pancreatic cancer [3]. Almost all treatment options for CP aim to combate pain, and only surgical interventions that have more pronounced and long lasting effect compared with, for example, endoscopic interventions, are most effective [1,4]. Laparoscopic surgical procedures today due to technological progress are actively used and implemented in pancreatic surgery, but their use in CP remains insufficient. The first report on the successful implementation of laparoscopic lateral pancreatojejunostomy (LLPJS) was made by Kurian and Gagner in 1999 [5]. Today there is a small number of reports on the successful implementation of the LLPJS, with the largest number of operations 12 and 17 among two surgeons [6,7]. The number of LLPJS performed in other surgeons, according to these publications by 2015, together did not exceed 50 operations [8-11]. But assessments of the relevance and feasibility of LLPJS are limited by an abundance of publications and very controversial among known pancreatic surgeons.

Material and methods. For the period 2016-2018, four attempts were made by the LLPJS on the basis of the Department of Surgery and Minimally Invasive Technologies, which was 16% among all patients with CP operated during this time. Among them were two women and two men, the average age was 42,6 years. Inclusion criteria were patients with CP disease without enlargement of the head of pancreas and dilatation of the main pancreatic duct over 10 mm (mean diameter 12,8 mm) and the presence of concernments only in its lumen, without biliary and portal hypertension.

Surgical technique. Position of the patient on the operating table on the back with dilated legs. The operating surgeon was located from the beginning between the legs of the patient, the assistants are on the right and on the left, then at the stage of formation of pancreatojejunoanastomosis on the right, and the cameramen is between the legs of the patient. The inclination angle of the operating table during the operation was changed for greater convenience of the surgical team and better access to the area of interest. The first trocar is set slightly below the navel after reaching the pressure in the abdominal cavity 12-14 mm Hg. In addition, two troacar mounted on the right and one or two to the left of the navel (Fig. 1) were additionally fanciful.

The lesser sac was opened with the aid of an ultrasound dissection device Sonicsion, the stomach was lifted upward, the pancreas was identified, then punctured (Fig. 2), and the opening of the main pancreatic duct from the isthmus to the body using a monopolar hook was performed (Fig. 3).

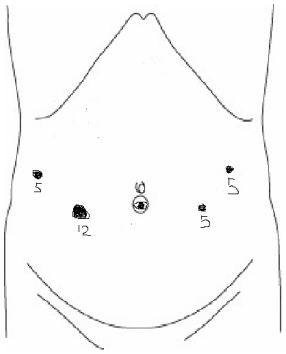

Fig. 1. Portplacement for Laparoscopic Lateral Pancreatojejunostomy

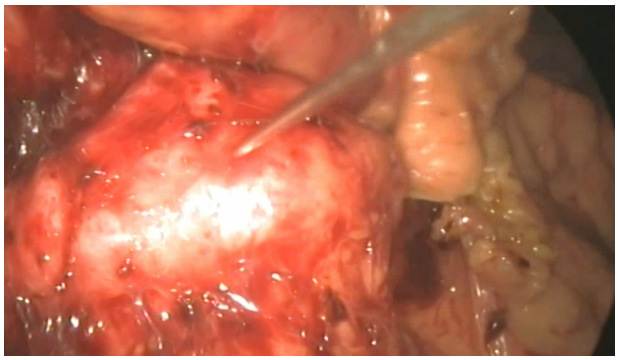

Fig. 2. Puncture of the main pancreatic duct

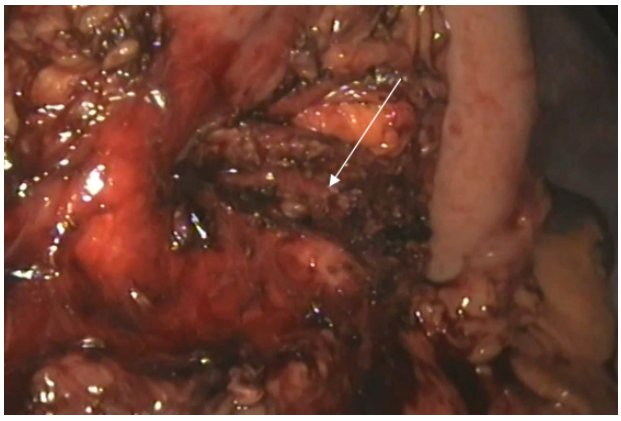

Fig. 3. Appearance of the main pancreatic duct (indicated by an arrow)

Concrements were removed from the main pancreatic duct. Using the stapler, Endo GIA 60 (blue cassette) the small intestine at a distance of 20 cm from the ligament of Treitz (Fig. 4) was intersected, and its detachable part was carried through a hole in the mescolon to the pancreas. With the help of barbed suture V-lok 2-0 length of 30 cm we formed longitudinal pancreatojejunoanastomosis with a single-row continuous suture (Fig. 5).

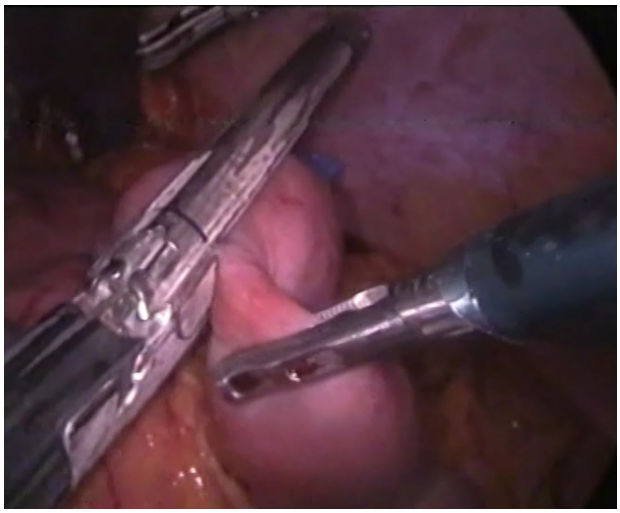

Fig. 4. Intersection of the small bowel stapler Endo GIA 60

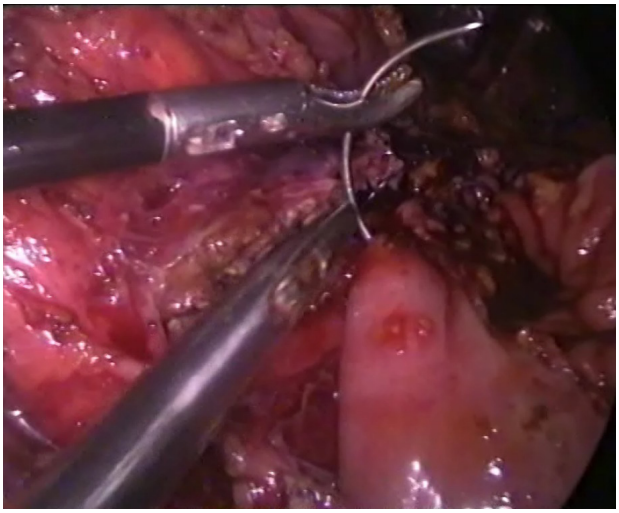

Fig. 5. Formation of laparoscopic lateral pancreato-jejunal anastomosis

At the expense of the Stapler, Endo GIA 60 (blue cassette) was formed by jejunojejunostomy (Roux-loop), the hole after the stapler was sutured with a single-row suture V-lok 2-0 15 cm. For all patients cholecystectomy with separate clumping of the bladder duct and artery was performed. The operation was completed by drainage of the abdominal cavity and sewing of the ports.

Results and their discussion. The Table shows the results of operations.

With four attempts, the total laparoscopic operation was performed in 2 patients. In 2 patients, a conversion was made: in one case, due to uncontrolled bleeding from the pancreas, in the other - because of the inability to find the main pancreatic duct. It is possible to avoid conversion by using intraoperative ultrasound. The average transaction time was 207 minutes. The post-operative stay was an average of 9 days, and the average follow-up observation period was 15 months. One patient was observed to have a flow of bile by drainage up to 4 days, which spontaneously stopped. There were no pancreatic fistulas and fatal cases. All patients in the long-term outcome noticed pain disappearance and weight gain. According to the questionnaires SF-36 and EORTC BCH there was a significant improvement on functional scales, one patient even became pregnant and gave birth to a child.

Until recently it was believed that lateral pancreatic pancreato-jejunal anastomosis was emerged from the arsenal of surgical operations in the CP due to a high percentage (up to 15-40%) of unsatisfactory results, the spread of duodenum-preserving resection of the pancreas and the emergence of other mechanisms for explaining pain other than central pancreatic duct hypertension [12].

But there is a group of patients on the CP, which shows a fairly simple operation. These are patients with an enlarged major pancreatic duct without enlarging the pancreas head [1, 13]. Moreover, 1 retrospective single-centered studies in the Freiburg University Clinic, which included 224 patients, showed that a higher survival rate of post-operative pain was noted when the duration of the disease was over 3 years [14]. Therefore, even in recent guidelines, understanding and treatment of chronic pancreatitis pain reveal that existing data on the timing of surgical treatment in patients with CP suggests early surgery, that is, within the first 2-3 years after the diagnosis or the onset of symptoms [1]. It is precisely for the «early surgery» with CP that the implementation of LLPJS is optimal. Elimination of central pancreatic hypertension can hold back the progression of CP, prevent the development of irreversible changes in parenchyma and the inclusion of other mechanisms of pain development, such as intraparenchymal hypertension, perineural infiltration and hypertrophy of nerve fibers [15].

Unfortunately, the situation with patients with CP is such that they have to address to a pancreatic surgeon after prolonged exhausting treatment with substitute enzyme preparations, after endoscopic or symptomatic operations. Therefore, the selection of patients, which is possible to perform LLPJS is extremely difficult. The LLPJS itself is a technically uncomplicated procedure with sufficient laparoscopic surgery skills.

Conclusions

1. Laparoscopic surgery in the treatment of chronic pancreatitis is not widespread, but attractive and opens up new opportunities for “old methods”.

Table. Results of laparoscopic lateral pancreatojejunoanastomosis

Number of patients	**4**
Successful total LLPJS	2
Conversion	2
Duration of operation	175 and 240 min
Intraoperative blood loss	50 and 120 ml
Mortality	-
Complications	1 (grade II by Clavien-Dindo)
Duration of stay in hospital	7 and 15 days
Follow-up	20 and 10 months

2. Laparoscopic lateral pancreatojejunostomy is a safe, effective and expedient operation, especially with "early chronic pancreatitis" without enlarging the head of pancreas, but requires a strict selection of patients and further research.

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SUMMARY

LAPAROSCOPIC LATERAL PANCREATOJEJUNOANASTOMOSIS IN TREATMENT OF CHRONIC PANCREATITIS: REPORTING THE FIRST EXPIRIENCE IN UKRAINE

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Surgery is a more effective option for pain relief in chronic pancreatitis. It relates to those patients who don't have an increase in the head of the pancreas, and there is only dilatation of the main pancreatic duct, a good results can give the performance of laparoscopic lateral pancreatojejunostomy.

Four attempts of laparoscopic lateral pancreatojejunostomy were made in patients with early chronic pancreatitis without an increase in the head of the pancreas. There were two females and two men and average age was 42,6. The indications for surgery in all patients was abdominal pain and dilatation main pancreatic duct (the average diameter was 12,8 mm). We used five-port technique. After opening omental bursa, we found, punctured and opened the main pancreatic duct. Then, using a two linear staplers Endo-Gia 60 to handle the jejunum loops by Roux-en-Y. We we performed single-row longitudinal pancreatojejunostomy with barbed-suture V-Loc.

We had two conversion to open surgery, because of the inability to find the main pancreatic duct and bleeding. The average operation time was 207 minutes. Post-operative stay was average 9 days and on median follow-up of 12 month. Post-operatively, there were no major morbidity and nil mortality. All patients had complete pain relief and significant weight gain.

Laparoscopic longitudinal pancreaticojejunostomy is safe, effective and feasible, especially with "early chronic pancreatitis" without an increase in the head of the pancreas.

Keywords: chronic pancreatitis, laparoscopic lateral pancreaticojejunostomy.

РЕЗЮМЕ

ЛАПАРОСКОПИЧЕСКАЯ ЛАТЕРАЛЬНАЯ ПАНКРЕАТОЕЮНОСТОМИЯ ПРИ ХРОНИЧЕСКОМ ПАНКРЕАТИТЕ. СООБЩЕНИЕ О ПЕРВОМ ОПЫТЕ В УКРАИНЕ

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Хирургия является эффективным способом купирования боли при хроническом панкреатите. При центральной панкреатической гипертензии без увеличения головки поджелудочной железы хорошие результаты выявлены при проведении лапароскопической продольной панкреатоеюностомии.

Четыре лапароскопические продольные панкреатоеюностомии выполнены пациентам с ранним хроническим панкреатитом без увеличения головки поджелудочной железы (две женщины и двое мужчин), средний возраст - 42,6 года. Показаниями к операции у всех пациентов были боль в животе, расширение главного панкреатического протока, средний диаметр составил 12,8 мм. Использована пятипортовая техника. После открытия сальниковой сумки идентифицировали и пунктировали главный панкреатический проток с его дальнейшим продольным рассечением. Затем с помощью двух линейных степлеров Endo-Gia 60 формировали изолированную петлю тощей кишки по Roux-en-Y, после чего выполняли однорядный продольный панкреатоеюноанастомоз с помощью нити V-Loc.

Ввиду невозможности обнаружить главный панкреатический проток и обильного кровотечения отмечались две конверсии на открытую операцию. Среднее время операции - 207 минут. Послеоперационное пребывание в больнице составило, в среднем, 9 дней, а follow-up наблюдение - 12 месяцев. В послеоперационном периоде случаев летальности не отмечено. Достигнуто полное купирование болевого синдрома и значимое увеличение массы тела.

В результате проведенного исследования авторами делается вывод, что лапароскопическая латеральная панкреатоеюностомия является безопасной, эффективной процедурой, особенно при раннем хроническом панкреатите без увеличения головки поджелудочной железы

რეზიუმე

ლაპაროსკოპიული ლატერალური პანკრეატოეიუნოსტომია ქრონიკული პანკრეატიტის დროს. შეტყობინება პირველი გამოცდილების შესახებ უკრაინაში

იუ. მიხეევი

ზაპოროჟიეს დიპლომის შემდგომი განათლების სამედიცინო აკადემია,
ქირურგიის და მცირეინვაზიური ტექნოლოგიების კათედრა

ქირურგიული ჩარევა განიხილება ტკივილის კუპირების ეფექტურ საშუალებად ქრონიკული პანკრეატიტის დროს. ცენტრალური პანკრეასული ჰიპერტენზიის დროს პანკრეასის თავის გადიდების გარეშე კარგი შედეგები აღინიშნება ლაპაროსკოპიული გასწვრივი პანკრეატოეიუნოსტომიის ჩატარების შემდგომ.

ოთხ პაციენტს ადრეული ქრონიკული პანკრეატიტით (ორი ქალი, ორი მამაკაცი; საშუალო ასაკი–42,6 წელი) ჩაუტარდა ლაპაროსკოპიული გასწვრივი პანკრეატოეიუნოსტომია. ყველა პაციენტში ოპერაციის ჩვენებას წარმოადგენდა ტკივილი მუცლის არეში, პანკრეასის სადინარის გაფართოება, საშუალო დიამეტრით – 12,8 მმ. ლაპაროსკოპიულად იდენტიფიცირდებოდა პანკრეასის მთავარი სადინარი მისი შემდგომი გასწვრივი კვეთით. შემდეგ ორი ხაზოვანი სტეპლერით Endo-Gia 60 ფორმირდებოდა მლივი ნაწლავის იზოლირებული მარყუჟი Roux-en-Y-ით, რის შემდეგაც კეთდებოდა ერთმომენტიანი გასწვრივი პანკრეატოეიუნოანასტომოზი ძაფით V-Loc.

პანკრეასის თავის აღმოჩენის შეუძლებლობის და ძლიერი სისხლდენის გამო ჩატარდა ორი კონვერსია ღია ოპერაციად. ოპერაციის საშუალო ხანგრძლივობა - 207 წუთი. ოპერაციის შემდეგ სტაციონარში დაყოვნების დრო –საშუალოდ 9 დღე, follow-up დაკვირვება კი – 12 თვე. ოპერაციის შემდგომ პერიოდში ლეტალობა არ აღინიშნა. მიღწეულია ტკივილის სინდრომის სრული კუპირება და სხეულის წონის მნიშვნელოვანი მატება.

ავტორები დაასკვნიან, რომ ლაპაროსკოპიული ლატერალური პანკრეატოეიუნოსტომია წარმოადგენს უსაფრთხო, ეფექტურ პროცედურას, განსაკუთრებით – ადრეული ქრონიკული პანკრეატიტის დროს პანკრეასის თავის გადიდების გარეშე.

EFFECT OF AGE AT DIAGNOSIS ON THE PROGNOSES IN FEMALE BREAST CANCER PATIENTS IN GEORGIA

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Breast cancer (BC) survival is associated with many prognostic factors, such as tumor stage and size, histological grade, lymph node status, estrogen receptor status, and the effectiveness of treatment. Significant patient characteristics that could affect BC survival include age at diagnosis and presence of comorbidity. However, numerous studies have reported data about the effect of age on survival, and the results have been conflicting, this issue is still controversial [5,7]. In addition, not only survival, but also the role of different prognostic factors can vary according to age at diagnosis.

The results of previous statistical analysis, which is given in the table 1, showed that, in Georgia BC diagnosed among older women (60 years and over) had a higher hazard of death [12].

Table 1. Age at diagnosis of patients included in the study and Hazard Ratio (HR) for Mortality

Age at diagnosis	*n (%)*	*HR (95% CI)*	p-value
cancer diagnosed under 41 years of age	380 (9.9%)	*reference*	
cancer diagnosed between 41-59 years of age	1907 (49.5%)	1.45 (1.02-2.04)	0.04
cancer diagnosed 60 years and over	1565 (40.6%)	2.40 (1.70-3.39)	0.00