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ONE-DAY SURGERY (SHORT TERM DEPARTMENT) IN THE TREATMENT OF PATIENTS SUFFERING FROM CHOLELITHIASIS

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ХИРУРГИЯ ОДНОГО ДНЯ (СТАЦИОНАР КОРОТКОГО ПРЕБЫВАНИЯ) В ЛЕЧЕНИИ БОЛЬНЫХ ЖЕЛЧНОКАМЕННОЙ БОЛЕЗНЬЮ

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В 2006–2011 гг. в нашей клинике выполнено 4533 лапароскопических холецистэктомий. 557 (12,3 %) пациентов находились в стационаре короткого пребывания. Совместно с анестезиологом проводился тщательный отбор пациентов. Выписывали больных при полной уверенности в благополучном течении послеоперационного периода — через 24 ч после поступления с последующим медицинским «сопровождением» в амбулаторных условиях. Из запланированных в стационаре короткого пребывания 678 больных операция и лечение в предполагаемые сроки состоялись у 557. Пациенты наблюдались оперирующим хирургом на протяжении 4–7 дней. При тщательном отборе больных с хроническим калькулезным холециститом возможно их успешное лечение в стационаре короткого пребывания (до 20 %).

Ключевые слова: желчнокаменная болезнь, хронический калькулезный холецистит, стационар короткого пребывания, хирургия одного дня.

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Introduction. Laparoscopic cholecystectomy was recognized as operation of choice in treatment of cholelithiasis. The terms of hospital treatment were maximum decreased with a widespread introduction of laparoscopic technologies in treatment of cholelithiasis. In USA, Japan, European countries the hospitalization after elective laparoscopic cholecystectomy may be no more than 24 hours. From 15 to 30% of laparoscopic cholecystectomies are carried out by "one day surgery" principles.

Materials and methods. In our hospital within the period from 2006 to 2011 there were carried out 4,533 laparoscopic cholecystectomies. There were operated 2,800 (61.8%) patients suffering from chronic cholelithiasis. 557 (12.3%) patients suffering from cholelithiasis were discharged from the hospital in 24 hours.

Results and discussion. There were planned 678 patients with cholelithiasis to be operated by "one day surgery", but operation and treatment within this term took place in 557 patients. With raising experience the number of patients has grown from 39 (9,9%) in 2006 to 156 (19.5%) in 2011. There were no severe complications. Umbilicitis was formed in 14 patients in periumphalic area, which didn't require hospital treatment. From 2007 to 2010 in our hospital 102 (2.3%) patients, which were hospitalized with acute cholecystitis, were treated in a short term department.



Conclusions. Laparoscopic cholecystectomy in a “short term department” may be made in 20% of patients suffering from cholelithiasis. Laparoscopic cholecystectomy in “short term department” needs careful selection: non-presence of severe pathology (ASA I-II), absence of technical difficulties during operation, the ability of medical “support” after discharge. Laparoscopic cholecystectomy in “short term department” allows using surgical departments more effectively and requires the further study and development.

Key words: cholelithiasis, chronic calculous cholecystitis, short term department, one day surgery.

Introduction

About 20% of adult population suffer from cholelithiasis [1]. Since the nineties of last century the surgical technique and laparoscopic instruments have been improved. It caused the reduction of operation duration and quantity of postoperative complications. Laparoscopic cholecystectomy was recognized as operation of choice in treatment of cholelithiasis [2]. It has advantages in reduction of intraoperative trauma, and as a consequence the reduction of postoperative rehabilitation period [3]. The duration of hospitalization after laparoscopic cholecystectomy is 2–3 days, after laparotomy is 7–9 days [4]. The terms of hospital treatment were maximum decreased with a widespread introduction of laparoscopic technologies in treatment of cholelithiasis. In USA, Japan, European countries the hospitalization after elective laparoscopic cholecystectomy may be no more than 24 hrs. This direction is successfully introduced in cases of acute appendicitis treatment, hernioplasty of inguinal and umbilical hernias, in cases of GERD surgical treatment, as well as in gynecology practice. From 15% to 30% of laparoscopic cholecystectomies are carried out by principles of “one day surgery” [5].

Materials and Methods

In our hospital in period from 2006 to 2011 there were carried out 4533 laparoscopic cholecystectomies. There were operated 2800 (61.8%) patients suffering from chronic cholelithiasis. 557 (12.3%) patients suffering from cholelithiasis were discharged from the hospital in 24 hours. The most of them were women (87.3%). The average age of patients was 45 ± 2 .

3–5 days before hospitalization patients had comprehensive out-patient examination. There were carried out: common blood count, urinalysis, coagulogram, X-ray examination of thorax, ECG, FGDS, ultrasound examination of abdominal organs. According to clinical picture other examinations were performed (CT, MRI, irrigoscopy etc.). As an important requirement was therapeutic examination. Treatment in the “short term department” was proposed to the patients without concomitant pathology (ASA I-II). Patients with suspected choledocholithiasis (jaundice in anamnesis, dilatation of common bile duct according to ultrasound examination) and upper middle laparotomy were excluded. The most important principles of selection were social indicators: accommodation in the city, patient’s motivation to stay at home in postoperative period, possibility to contact by phone, family’s care. Before a planned hospitalization patients were examined by anesthesiologist and in case of absence of contraindications were informed about the possibility of “one day surgery” treatment.

Patients were hospitalized in the morning. Laparoscopic cholecystectomy was performed in 2–4 hours after admission. It was made by standard methods, as usually with using of 3 ports and in 11 cases by “cosmetic” method of cholecystectomy with elements of NOTES-technology, which was developed by our department [6]. For anesthetic induction propofol, esmiron, phentaniil were used. Maintenance of anesthesia was performed by propofol, esmiron, phentaniil at the same time with oxygen-nitrous mixture. In order to relieve nausea 8 mg of osetron were injected. Last time at the end of

operation subdiaphragmatic and subhepatic space were irrigated by anesthetic solution. Bupivacaine was injected around the trocar wounds. Usually the operation was ended by staging a thin drainage to the foramen Winslow. In postoperative period narcotic analgesics were not used. The prevention using of antibiotics was performed by a standard scheme. By indications there were used LMWH. In case of abnormalities identifying or in case of technical difficulties hospitalization was prolonged as much as clinical course required. The previous operations on abdominal organs weren’t the absolute contraindication, the last decision was made intraoperative. Our observation shows that intersection of single commissure has no effect on severity of postoperative pain.

Results and Discussion

There were planned 678 patients with cholelithiasis to be operated by “one day surgery”, but operation and treatment in these term in 557 patients. With accumulation of experience the quantity of patients has grown from 39 (9,9%) in 2006 to 156 (19.5%) in 2011. The average duration of laparoscopic cholecystectomy was 30–40 min.

The causes of treatment duration increasing were following: painful syndrome, technical difficulties during surgery, which needed closer observation of surgeon, unplanned simultaneous operations and other reasons.

There were no severe complications. Umbilicitis formed in 14 patients in periomphalic area, which didn’t require hospital treatment.

With accumulation of experience the indications for staying in “short term department” were expanded. From 2007 to 2010 in



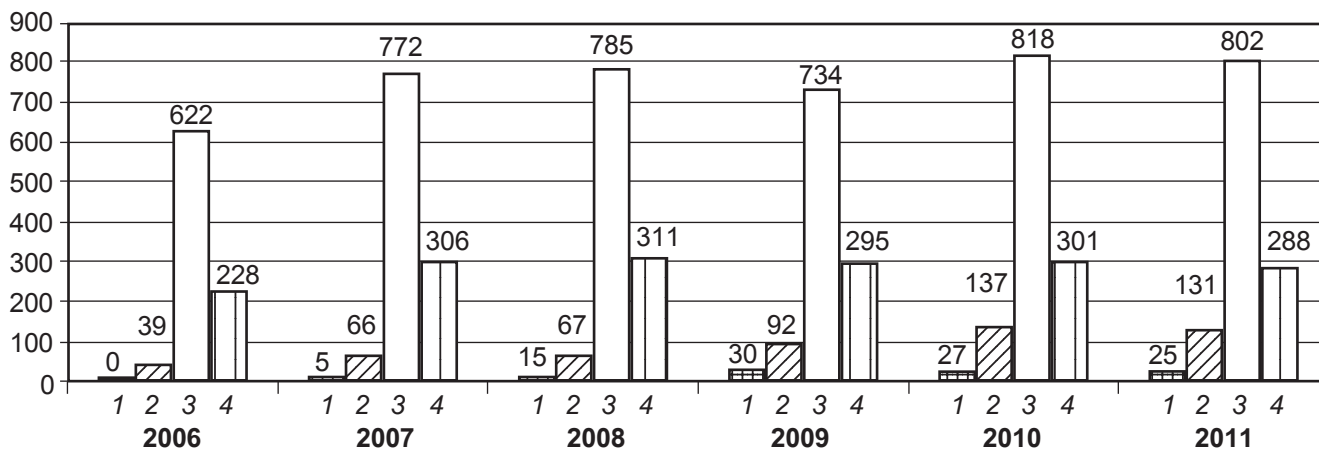


Fig. 1. Quantity of patients with cholelithiasis, which were treated in "short term department" from 2006 to 2011: 1 — one day surgery for acute calculous cholecystitis; 2 — one day surgery for chronic calculous cholecystitis; 3 — laparoscopic cholecystectomy; 4 — laparoscopic cholecystectomy in acute cholecystitis

our hospital 102 (2.3%) patients, which were hospitalized with acute cholecystitis through 3–5 days from the beginning of disease were treated in "short term department" (Fig. 1). Patients were discharged no more than 24 hours if doctors had a complete confidence in the favorable postoperative period. The attention was paid to patient's general health, intensity of postoperative pain and nausea, the quantity and character of discharge by drainage, the individual motivation for discharge. In doubt of successful operation or early postoperative period the terms of being patients in the department were prolonged. Patients were under surgeon's observation during 4–7 days. It was recommended to pass through 1–2 preventive examinations before stitches would be removed.

Conclusions

1. Laparoscopic cholecystectomy in "short term department" may be made in 20% of patients suffering from cholelithiasis.
2. Laparoscopic cholecystectomy in "short term department" needs careful selection: non-presence of severe pathology (ASA I-II), absence of technical difficulties during operation, the ability of medical "support" after discharge.
3. Laparoscopic cholecystectomy in "short term department"

allows using surgical departments more effectively and required the further study and development.

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